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October 7, 1968

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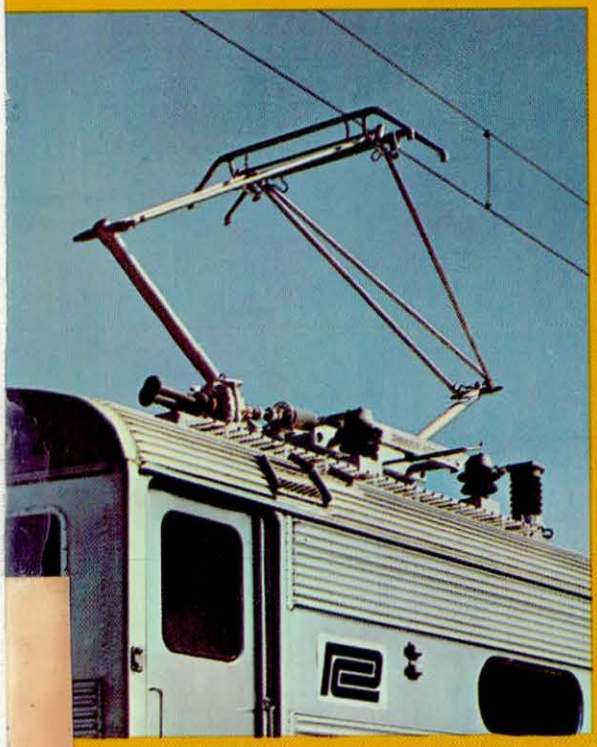
RAILWAY AGE

THE TRANSPORTATION WEEKLY



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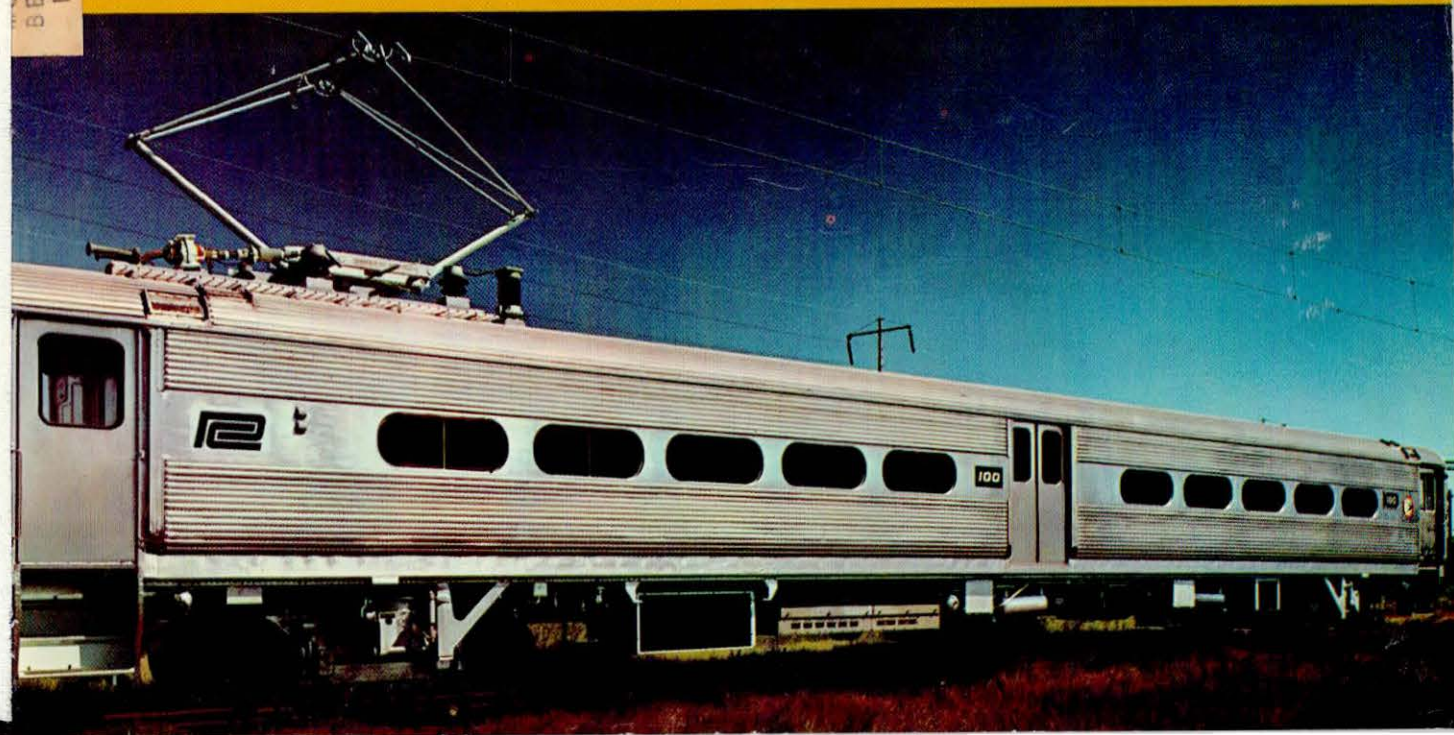

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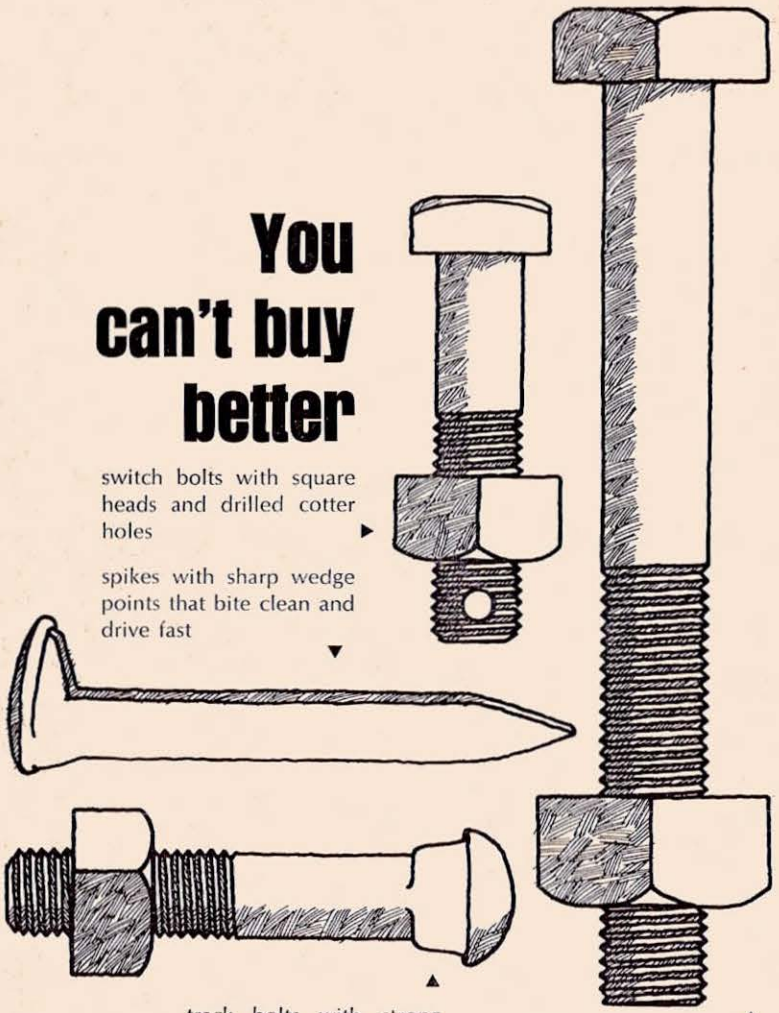

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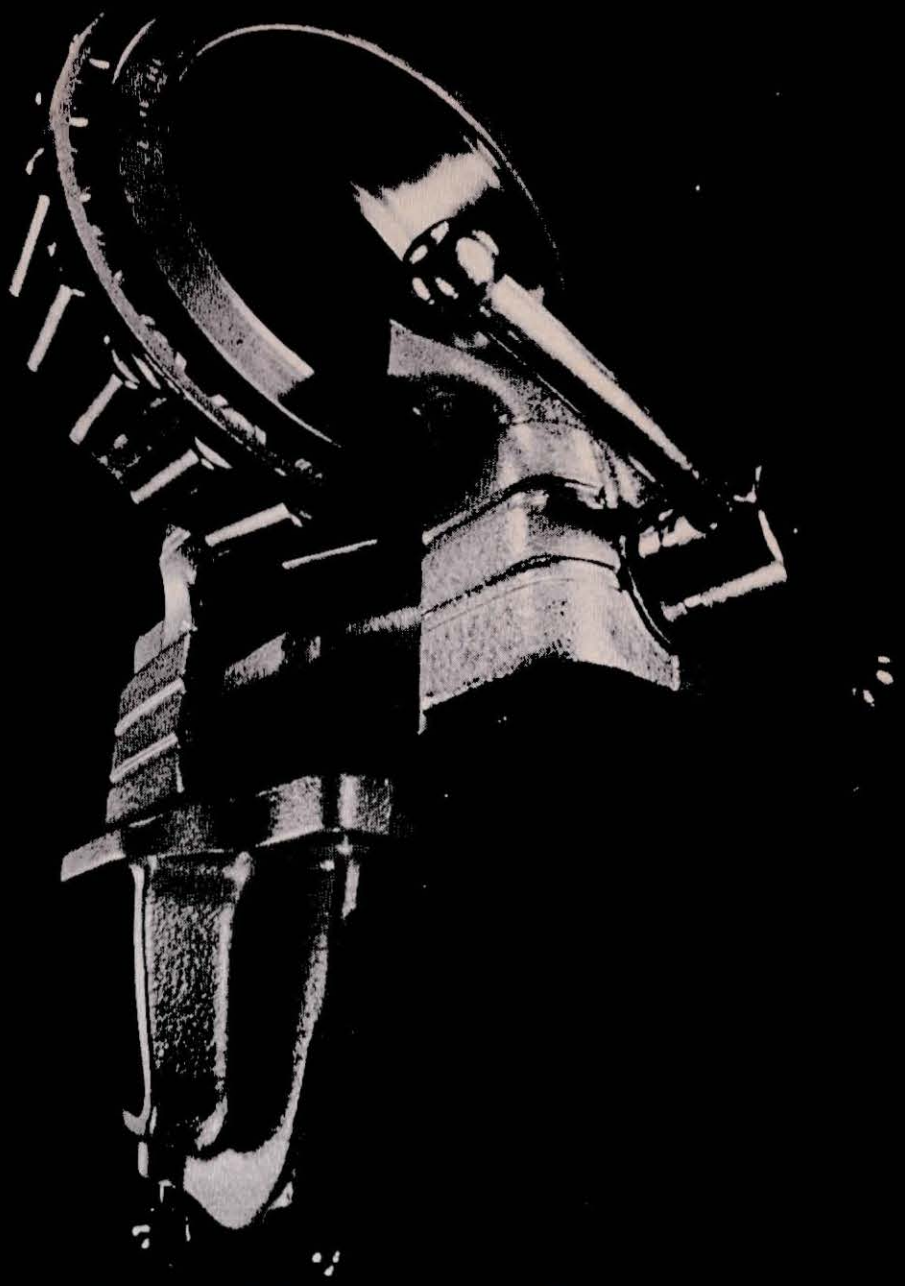

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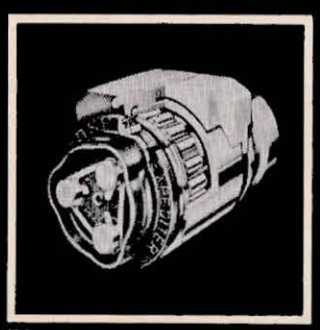

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RAILWAY AGE

Oct. 7, 1968 • Vol. 165, No. 14

THIS WEEK

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The service is an important two-way channel between suburb and city.

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Cleveland's Mayor Stokes has harsh words for highway proponents.

38 Rice lists goals for data systems

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. . . AND COMING NEXT WEEK

How the newest types of track-maintenance machines are producing results in terms of increased production per man-hour. The machines, says a Roadmasters' Association committee, also improve the quality of the work and reduce manpower requirements. Also: How Missouri Pacific built a new 27-mile branch line fast—under trying conditions.

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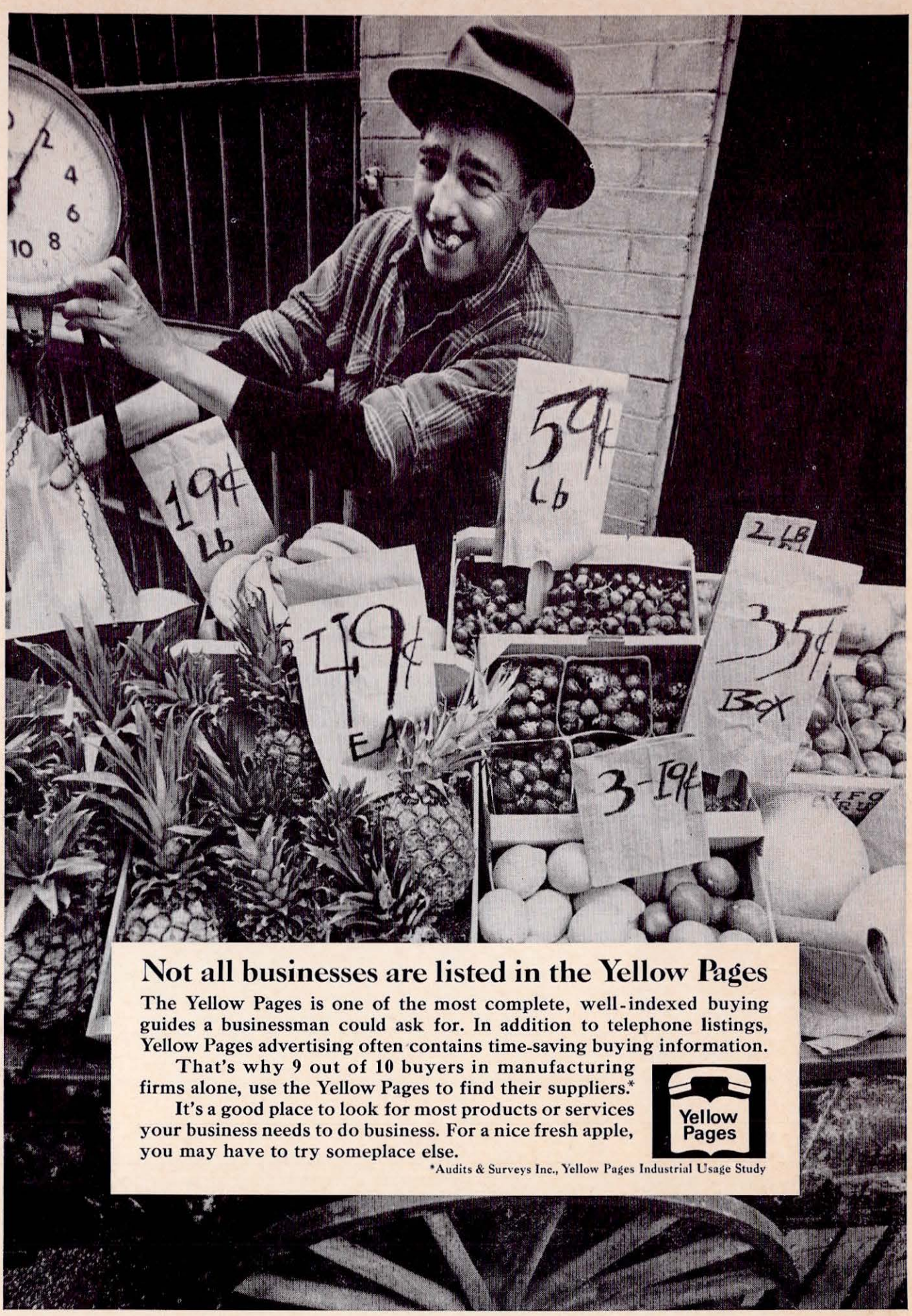

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Yellow Pages

*Audits & Surveys Inc., Yellow Pages Industrial Usage Study

SHORT AND SIGNIFICANT

Kayser-Roth to join Penn Central about Jan. 1

Penn Central will acquire Kayser-Roth on or before Jan. 1, 1969, PC Chairman Stuart T. Saunders said last week. Under the terms of the agreement, two shares of Pennsylvania Company preferred stock, $100 par value, will be issued for each 5.2 shares of Kayser-Roth common stock. It was also announced that Kayser-Roth will acquire the Green Shoe Manufacturing Co., makers of Stride Rite children's shoes. For the fiscal year ended June 30, Kayser-Roth had net earnings of $15.2 million.

Carbuilder voices optimism "for the long term"

ACF Industries is cautiously optimistic over the future of the freight-car market. At the company's annual meeting in New York, ACF President Henry A. Correa said the car-leasing business "is continuing its growth in both earnings and size of fleet." He said demand for tank cars is leading to an expansion of capacity at the company's Milton, Pa., plant. While other operations have been on a reduced basis in the last 12 months, Correa noted that "moderate production increases" have been made at the St. Louis plant. "We remain optimistic for the long term," he said, though he conceded "it may be some time before we again see the high level of order backlogs that we enjoyed in the mid-1960's."

ITT acquires transit ad company

International Telephone & Telegraph acquired control for an undisclosed price of Transportation Displays, Inc. (TDI), which operates display advertising on transit, commuter and other transportation lines. Transportation Displays management will stay on.

Employment continues steady decline

As wages and other labor costs continue to rise, the number of railroad employees continues to dwindle. The latest report from the ICC, for mid-August 1968, puts Class I railroad employment at 601,441—a decline of 0.43% from July and 2.27% from August 1967. Biggest percentage decrease from 1967 was in the category of professional, clerical and general employees (down 3.88%). Forty years ago, U.S. railroads had 1,660,000 employees.

DOT, HUD move to coordinate transit functions

Transportation Secretary Alan S. Boyd and Housing and Urban Development Secretary Robert Weaver have signed a Memorandum of Agreement designed to coordinate their urban transportation activities in five broad areas: (1) planning transportation and other systems that promote sound future urban development; (2) developing procedures which will encourage close co-operation between state and local planning agencies; (3) helping solve urban problems arising out of transportation projects; (4) exchanging information and advice on urban needs, programs and technologies relating to transportation; and (5) developing working relationships at national, state and local levels to insure coordination.

Truckers report increase in intercity traffic

The index of intercity truck tonnage for the week ended Sept. 21 was 139, compared with 130 for the corresponding week of 1967 and 137 for the preceding week of 1968, according to American Trucking Associations. The weekly level of tonnage hauled during the period 1957-59 is taken as 100.

Directors OK Rio Grande holding firm

Denver & Rio Grande Western directors have approved preliminary plans for the formation of a holding company. Rio Grande stockholders would be offered an exchange plan to be determined later. The railroad would be a subsidiary of the holding company. Other specific acquisitions aren't being considered now, says G. B. Aydelott, D&RGW president.

MONDAY MORNING REPORT

THE PUBLIC INTEREST: PASSENGERS?

There's an old story—a colleague swears it's true—about a press conference a few years ago with a railroad president whose road just the day before had announced a merger of grand proportions. The press had gathered, the president strode into the room, and a fuzzy-cheeked youth from the media broke the first question on this momentous day: "Sir, will a spoon really keep the coffee from slopping out of the cup in the dining car?" History, mercifully, does not record the railroad president's answer. Nor does it record the inner feelings of railroad men even today who want to tell people about all the good things in railroading—if only somebody would ask about something other than the passenger business. It's frustrating. It's also macabre—that the "public" seems most interested in that segment of railroading that is the most destructive of industry health.

NO. 1 IN THE SAVE-THE-TRAIN PARADE: THE CAL ZEPHYR

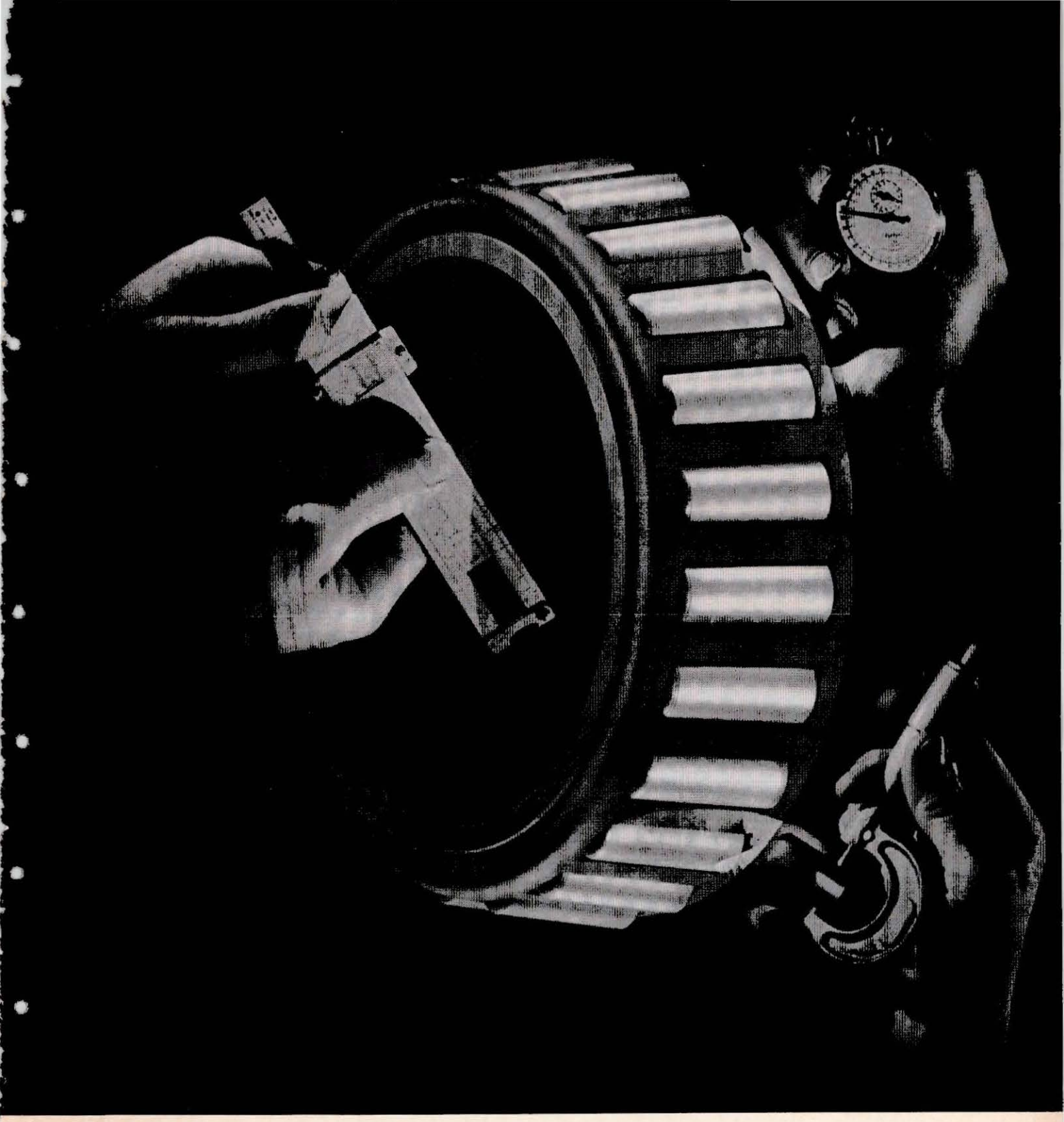
This being true—and it probably is—greater-than-normal significance just has to ride with the Burlington, Rio Grande and Western Pacific as they try once again to shore up the sagging "California Zephyr."

A "UNIQUE ASSET": WHOSE RESPONSIBILITY IS IT?

Twice, the ICC has refused to permit discontinuance. If the case comes up a third time, as it may well, the Commission will have a sizzling-hot potato to juggle: Just whose responsibility is it to maintain a "unique national asset," as the ICC has characterized the Zephyr?

AND WHAT COMES NEXT, IF A MIRACLE DOESN'T HAPPEN?

For their part, the three railroads are following through on many of the save-the-CZ suggestions that have been made. Fares will be increased and new, special charges will be imposed. And if this seems self-defeating, well, it was the ICC which suggested that people would pay more to ride the Zephyr. Promotion programs are being stepped-up, on a train that has always been well-promoted. CZ advertising will be doubled—tripled, in fact, for the rest of 1968. Importantly, the railroads seem determined to let the public know exactly what they're doing to save the train—and how it works. Miracles, however, seldom happen in railroading. If the CZ losses can indeed be stemmed, fine. If they can't, one can only hope that the Q, D&RGW and WP are not damaged too seriously in this Commission-ordered process.



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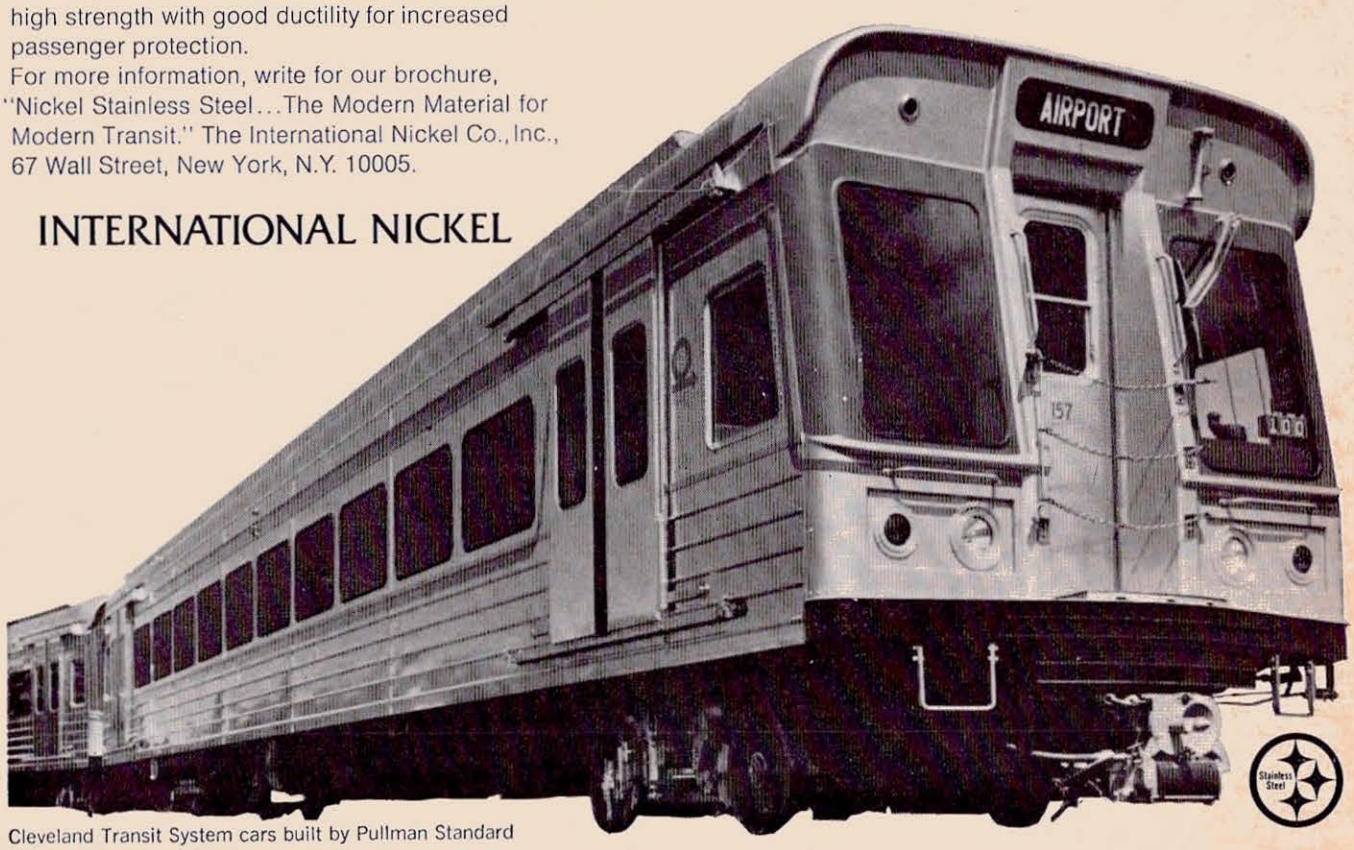


Cleveland Transit System cars built by Pullman Standard

RAILWAY AGE
THE TRANSPORTATION WEEKLY
October 7, 1968

WEEK AT A GLANCE

UP will spend $97 million for rolling stock

There are growing indications that railroad buying is headed for an upturn. Union Pacific disclosed last week that it will place orders for 1969 delivery of 4,154 new freight cars and 25 diesels at a total cost of $97 million. Two other railroads are known to have drawn up plans, not yet announced, for 10,000 freight cars. Meanwhile, current orders are picking up, highlighted by the Southern's purchase of 1,000 box cars and Penn Central's announcement that it will purchase an additional 130 diesels (RA, Sept. 30, pp. 11 and 59). It will be several weeks before most railroads complete their capital-improvement budgets for 1969, but present signs point to an increase of 10-12% over this year's anticipated $1.5-billion level. Only other announcement of a 1969 budget has come from the Soo Line, which will spend $10 million.

Losses mount as Belt of Chicago strike continues

According to the Chicago Association of Commerce & Industry, the area's economy is losing about $2 million a day through the Brotherhood of Railroad Trainmen's strike against the Belt Railway of Chicago. The National Mediation Board summoned the parties to a hurry-up meeting in Washington Sept. 26 (RA, Sept. 30, p. 11), but it was a fruitless trip for all concerned. Meanwhile, the calendar was flipping over for Illinois Central and Louisville & Nashville in their version of the BRT crew-consist dispute which has idled the Belt. IC could have been struck Sept. 21, but the BRT took no immediate action. L&N's date came up last week, and there was no advance indication of what, if anything, the union might choose to do in that situation. Three other roads—Kansas City Southern, Chicago & North Western and Richmond, Fredericksburg & Potomac—are coming along behind, in the timing scheme-of-things in crew-consist.

Traffic increase predicted for fourth quarter

The improvement in railroad carloadings will continue through the fourth quarter, according to the traffic forecast of the 13 Regional Shippers Advisory Boards. Estimates submitted by the Shippers Boards to the AAR's Car Service Division indicate a 1.4% increase in carloadings, compared with the corresponding 1967 period. Due to heavier loads per car and longer average hauls, this would produce a 4% increase in ton-miles. Only three of the boards—Allegheny, Central Western and Northwest—predict traffic declines. The Pacific Northwest board anticipates the biggest increase, 9.4%. On a nationwide basis, loadings of automobiles and trucks are expected to rise by 23.1%. A 3.5% increase is predicted in coal and coke loadings. A 12.3% drop in loadings of iron and steel and iron and steel products is foreseen. Other forecasts predict increases in loadings of citrus fruits (27%) and miscellaneous metals (21.5%).

Mechanical men get the word: It's "Change"

Change was the name of the game in Chicago last week. The recurring theme during the three-day meetings of the Coordinated Associations was summarized by J. W. Hawthorne, assistant vice president—equipment, Seaboard Coast Line, when he told the Locomotive Maintenance Officers Association: "We as mechanical officers will find ourselves, in a true managerial sense, directing the use of the tools of transport, not repairing or building them. Our work will be more and more centered on the intelligent use of these tools, expedient servicing of them, and the training of specialized personnel . . . Specialization in transport, not repair work, will become necessary."

Along with LMOA, the Air Brake, Car Department Officers and Railway Fuel and Operating Officers Associations held sessions. C. R. Zarfoss, vice president, Chesapeake & Ohio/Baltimore & Ohio, told RF&OOA that "because technology changes, because new improved tools are available, railroaders do not automatically and effortlessly change. Increased demands by the competitive environment, by more complicated hardware, by smarter customers, by the existence of new departments require that we be more informed, adept and effective."

With competition placing increasing emphasis on higher train speeds, one LMOA committee stressed that "what is needed in railroading is not spectacular spurts of performance, but consistent speed at reasonable levels and dedication to keeping trains moving on schedule. It is ridiculous to pay the premium for speed and then allow a train to spend hours, or even days, in a yard or terminal." To raise train speeds from 50 mph to 70 mph requires 39% more fuel per ton/mile and 95% more horsepower on level track. Locomotive maintentance problems, he noted, are also accentuated with high-speed operation.

GUS WELTY

LINES ON LABOR

BALLOTS WILL BE GOING OUT within a few days, and the rank-and-file will begin voting on the big merger—BRT+BLF&E+ORC&B+SUNA. The betting, now, is that unification will go through, and that the United Transportation Union will come into being.

WHAT HAPPENS NEXT? What happens if UTU is organized? What happens two, three, four, five years from now? The people who negotiated this historic four-way merger have been close-mouthed. But, for the short term, there is the presumption that BRT President Charles Luna will be the first UTU strong-man.

HERE'S WHERE AGE becomes a factor. Luna, according to the records, will be 62 on Oct. 21—an age BLF&E President H. E. Gilbert reached a couple of days ago, on Oct. 5. So—barring the emergence of some now-unheralded vice president—the future of UTU would seem to lie with the chiefs of the two small unions, SUNA's Neil P. Speirs, who will be 56 on Christmas Day; and ORC&B's Clyde F. Lane, who remains on the sunny-side of 50.

THIS KIND OF SPECULATION, of course, contains the highest percentage of guesswork. The proposed constitution has not yet been unveiled. No patterns of power can be established. Dominance of the big unions can't be measured. In all honesty, however, it's hard to see how UTU could lose, in either short- or long-term leadership, with what it will have. Luna has done an excellent job of running the biggest of the operating unions. He has made few mistakes, thus far. Gilbert could well be called the architect of union merger, or at least its historic proponent. He's senior man among the chiefs, and a man who couldn't define the word "surrender." Speirs, occasionally handicapped by referendum requirements, has done a thoughtful and generally progressive job of running a small, aggressive union. Lane, youngest in age and in chiefly-seniority, has brought stability to ORC&B—and, among the four chiefs, it has been Lane who has talked the most of the need for change, the need for adapting to the times.

ORGANIZATION OF UTU, no doubt, will put initial pressure on the railroads. There will be, no doubt, a period of muscle-flexing. But after that? Perhaps UTU leadership will really lead, into the kind of cooperative effort which will strengthen both the industry and the employees' position.

Illinois starts its probe of railroad safety

That investigation of railroad safety practices which the Illinois Commerce Commission is undertaking (RA, Sept. 23, p. 7) got moving with a "general outline" of what the Commission wants from the carriers. It will be no small task to supply the data. Meantime, there may be some challenge to the state group's jurisdiction. Also meantime, the Commission indicated that it may set dates for receiving testimony, sometime this week.

The Illinois regulators' two-page list of what they want indicates that the major thrust of the probe will be toward M/W practices. All railroads operating in the state—25, by the Commission's list—are defendants in this show-cause proceeding.

The "information required" statement covers these points:

—How are track inspections handled, and on what scheduling?

—How is track divided for ordinary maintenance, and what are the territories of maintenance allocated?

—What is the annual program for ordinary track maintenance, how is it handled and how is it determined? What proportion of the operating budget has been allocated for maintenance for each of the past five years? What type of equipment is used?

—What kind of programs for out-of-face renewal are being followed? How are they determined?

— What is each road's three-year record for derailments? What reports can be made on track conditions, cause of derailment, equipment involved, cost of equipment inspections?

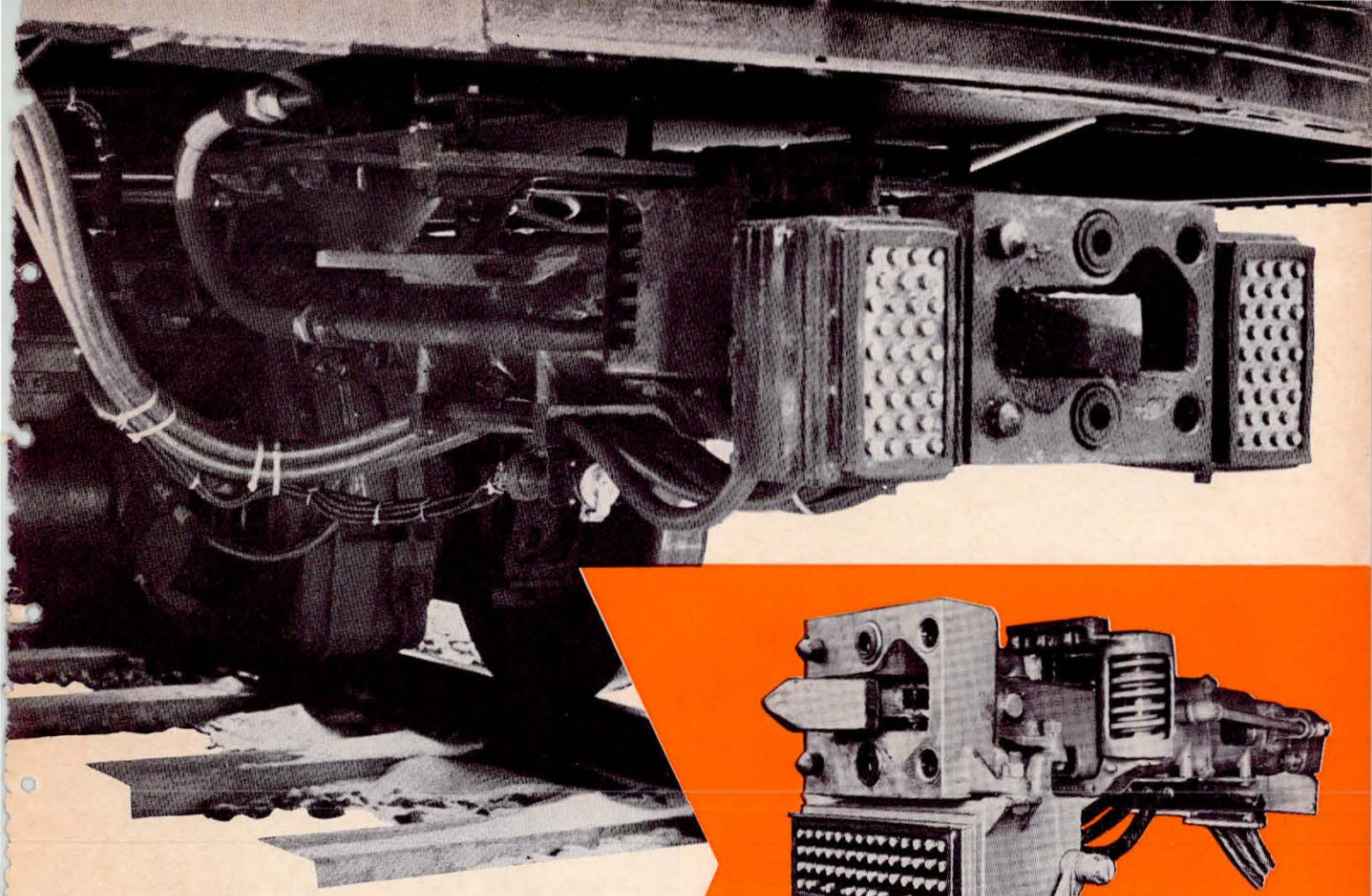
—What does the line chart show regarding profile, alignment, rail weight, ballast?

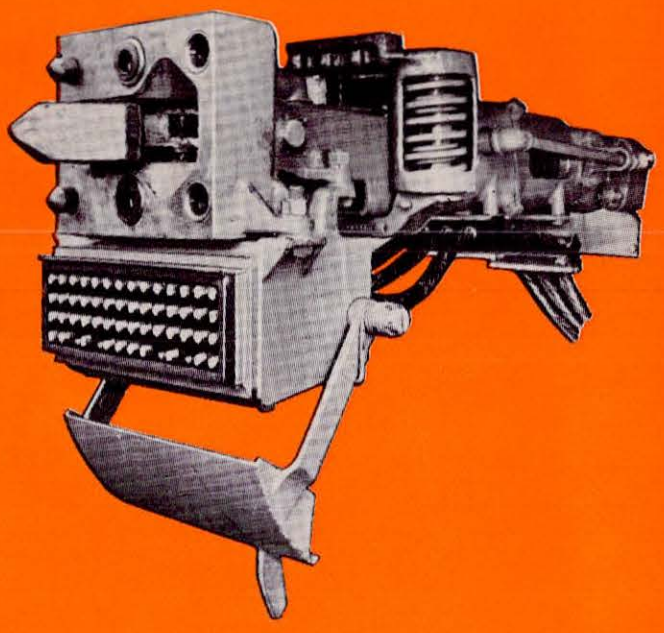
—What do records show regarding fixed and temporary speed restrictions?

In addition, the Illinois Commission wants a record on equipment which includes data on when and where inspected; when and where repaired, and types of detection devices used. From an operating standpoint, the regulators are asking "How do train crews participate in watching for track defects?"

Five of the rail unions—four ops and one non-op—have thus far indicated their intent to participate in the proceedings.

The only union to file its petition to intervene at the opening session was the Brotherhood of Locomotive Firemen & Enginemen.





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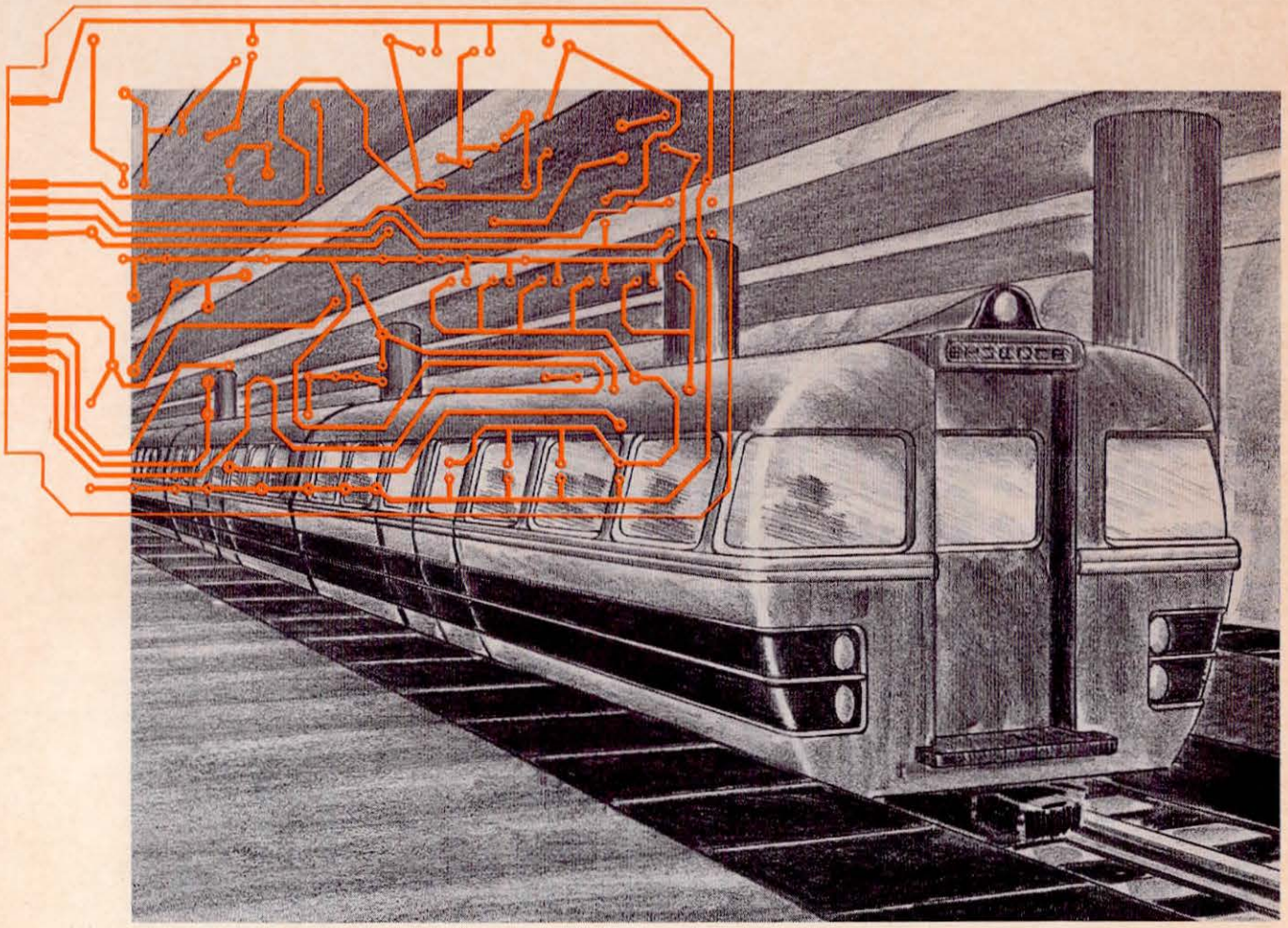

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GRS covers the entire rapid transit field.

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- Essential hardware items—signals, switch machines, control consoles, and a host of other devices.
- Custom-engineered, solid-state control systems on any level of sophistication—from simple speed control to complete automation.

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WHAT MAKES WOODINGS RAIL FASTENERS *Stay* TIGHT?

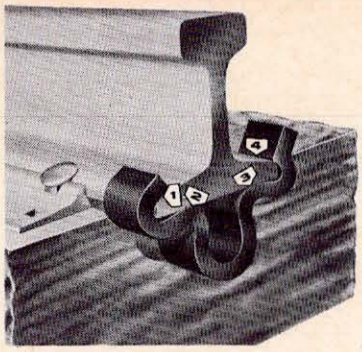
...it's the way they're made

We've been in this business a long time, and we've learned what it takes to keep rail fasteners tight. It's our special combination of product design, materials, forging and heat treating. For each group of products, our formula is different but the result is always the same—unexcelled tenacious holding power.

Here are three Woodings Railroad Fasteners that take a solid grip and hold on—Rail Anchors, Nut Locks, Triflex Springs.

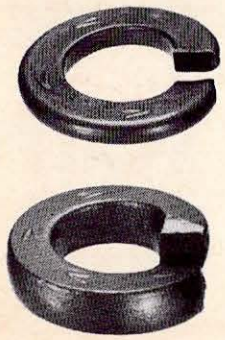
Unexcelled Holding Power

With its powerful spring pressure, its four-point contact grip, and its deep tie-bearing area, the Woodings Advanced-type Rail Anchor has unexcelled reserve strength. Tests by independent laboratories and railroads show that there is no rail anchor on the market that exceeds the Woodings Anchor's holding power. They are excellent for welded rail because of the unrelaxing grip that welded rail needs. They are readily applied by machine, or by hand.



Verona "Special" Alloy Nut Locks

Made in five sizes from 7/16" x 1/4" to 7/16" x 9/16"—Verona "Special" Alloy Nut Locks have the wide reactive range needed to keep track bolts tight. This reduces angle bar wear and rail batter, and eliminates periodic tightening of the bolts.



Equal Tension for All Track Bolts

You know the importance of having equal and proper tension in all track bolts. As far as we know, the Verona Triflex Spring is the only practical device available to keep track bolts tight with equal calibrated tension in all bolts.

WOODINGS-VERONA TOOL WORKS

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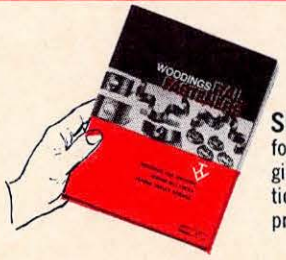


SEND for illustrated catalog giving more information on these railroad products.

SKOKIE GETS THEM COMING AND GOING

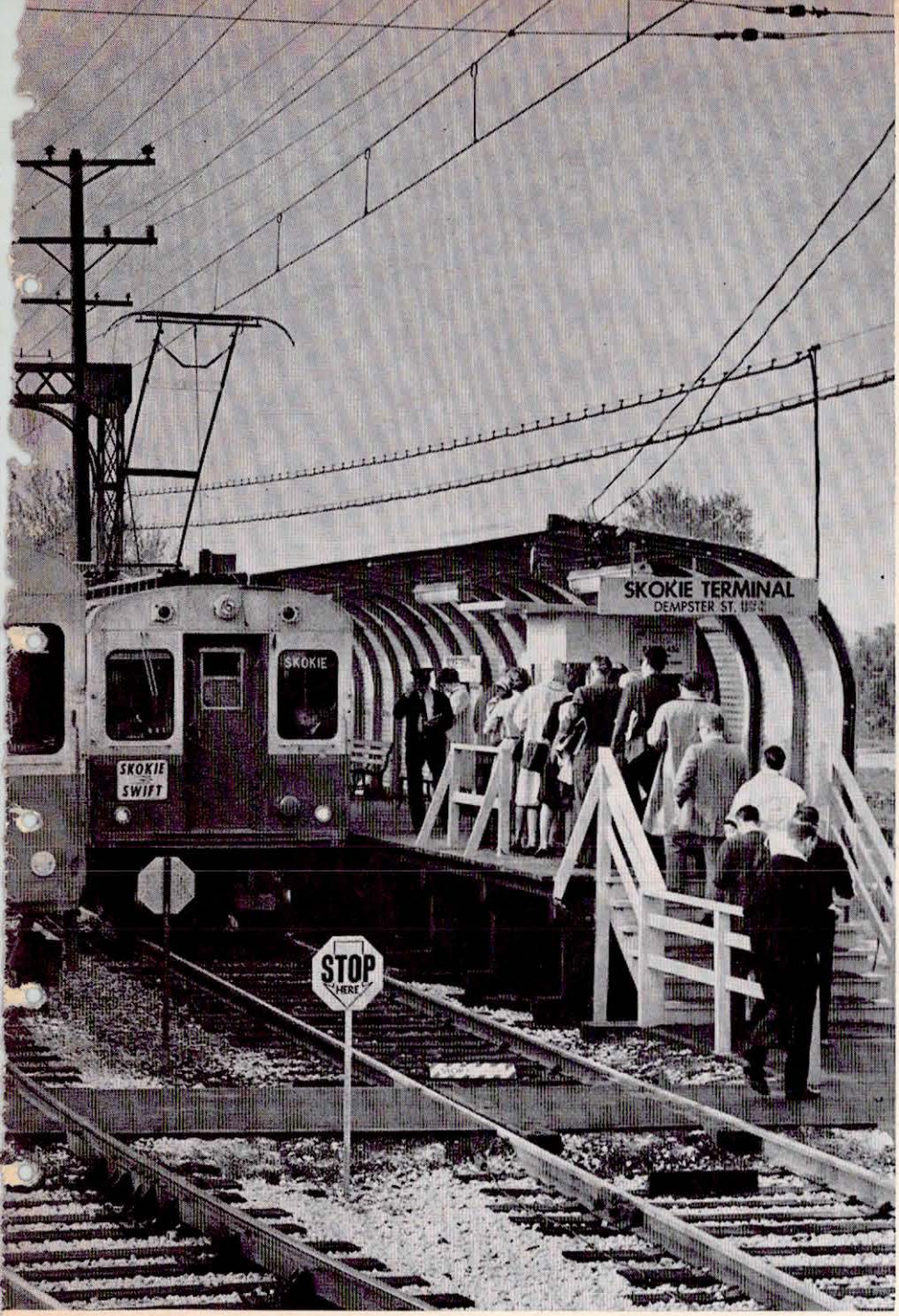
Skokie is an important two-way channel for exchanging workers between suburb and city.

For the little hustler, Skokie Swift, the trial ended more than two years ago. Its absorption by the Chicago Transit Authority now is so solid that CTA doesn't record separate Swift revenue figures. However, the company is proud enough of its five-mile, half-trolley shuttle service to issue a 66-page support of an important conclusion. The finding is that a medium-density suburban area can be linked effectively with the central city by a high-speed rail rapid-transit extension on a sound economic basis.

Skokie Swift started as a fast, two-station experiment April 20, 1964. It was incorporated into CTA two years later. The line was formed by reviving service over an abandoned inter-urban railway (Chicago North Shore & Milwaukee) between the Village of Skokie and the CTA Howard Street station, the north rapid terminal.

The line has become an important channel for the exchange of workers both ways between suburb and city. George Krambles, CTA research and planning superintendent, says, "Between 7,500 and 8,000 riders are currently served each weekday. . . . Traffic is being generated at more than five times the level thought probable when the project was in the planning stages. And this on a railroad forty years old which has twice proved a failure."

•**Sole line holding.** The Skokie Swift



"Traffic is being generated at more than five times the level thought probable when the project was in the planning stages."

CTA's GEORGE KRAMBLES

is "the only line on the CTA that's holding its own. The costs are typical (of the over-all rapid system), but the earnings are higher," Krambles says. Skokie earns about $1.50 per car mile, compared with 73 cents generally.

Earnings on the little line have grown despite a fare increase and a work stop. During the 1964-66 test, Skokie earned $1.16 per car mile, compared with 71 cents over-all. At that time, car-mile operating cost was 79 cents for Skokie and 81 cents for the other rapid service.

•**Fares cover costs.** Behind the major conclusion of the Skokie report is another finding—"fare collections can cover operating and maintenance costs if a high degree of productivity is maintained." The report fails to prove that statement, but Krambles supplies the missing defense.

He says first that Skokie annual earnings must total $170,000 for the operation to break even: "After CTA reimburses HUD for the unamortized value of its contribution toward project improvements, the net cost to HUD will be about $83,000. Skokie (the Village) will have spent about $34,500. CTA will have expended about $127,000 on net project costs, $241,000 for unamortized project plant, and it will have committed about $2.9 million on right-of-way and rolling stock investment."

This brings the gross investment that Skokie earnings must carry to about $3.4 million. That sum, obtained at 5% interest, means annual needed income of $170,000.

•**Slight net, even.** Krambles shows figures indicating that the Swift not only earned $170,000 during the second year of the test, but came out with a slight net of about $30,000. Revenues for the two-year project totaled about $780,000, and operating costs, $580,000. The difference must cover a planned 10-year capital improvement program.

How's the Swift doing now? It's hard to get an exact picture because Skokie revenue is tossed in with all CTA rapid income. However, there is at least one method of getting an approximate tally. That is by crediting Skokie with part of the total fare paid for transportation from suburb to city. The fare now is 50 cents, of which 20 cents is attributed to the Skokie Swift. This is a narrow rationing, Krambles says, and Skokie might validly be credited with a few cents more.

However, by the narrow measurement, Skokie falls just $4,000 short of the break-even figure. Annual revenue now totals about $470,000, and annual costs are about $304,000, for earnings of $166,000. Revenue includes $400,000 from passengers, $67,000 from park-and-ride facility (one), and $3,000 miscellaneous. Operating expenses include $235,000 to run the trains, $40,000 to maintain facilities, and $30,000 for depreciation.

•**Other conclusions.** The Skokie report makes these additional conclusions:

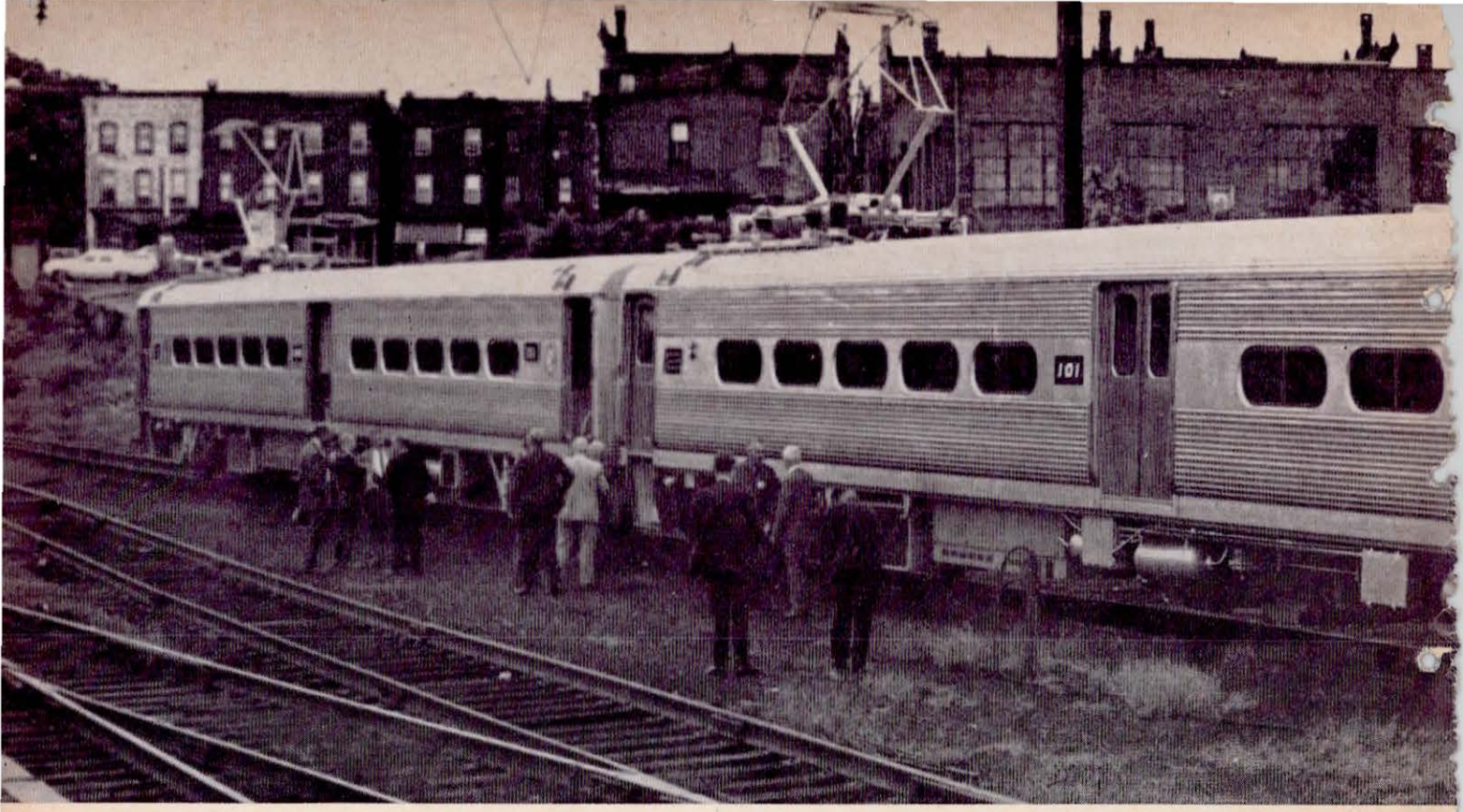
—A public investment is needed for right-of-way, equipment and facilities.

—Under certain conditions, long trains, numerous stations and direct through-service from suburb to central city are unnecessary.

—Many motorists in a metro area will switch to rapid transit if they can get reliable, convenient and time-saving service.

—A park-and-ride facility with ac-

(Continued on page 34)



ELECTRIC-POWERED CARS for New Jersey commuter service can cruise at speeds up to 100 mph. They can reach 80 mph 70 seconds

PC gets "most sophisticated

Thirty-five cars now being delivered by General Steel Industries may be forerunners of 400 more units in the state-owned commuter fleet.

The State of New Jersey, and its thousands of commuters and their commuter railroads, will be watching with more than passing interest the impending outcomes of a pair of statewide contests.

In one, a fun sort of thing which will be decided in mid-October, a state resident will be awarded $500 for submitting the most appropriate name for the 35 new all stainless steel commuter cars now being delivered to the state. The other, a higher stakes event involving the state's proposed $640 million transportation master plan bond issue, will be decided by the voters at the polls in November.

● **400 more cars?** If the latter contest ends with more aye than nay votes, another 400, or more, new commuter cars could be added to the state-owned fleet in the next five years, and a host of other improvements would be forthcoming along the commuter lines in the state.

The 35 yet-to-be-named cars in the $9.9 million order now being delivered by St. Louis Car Division, General Steel Industries, Inc., were financed, in part, by a demonstration grant provided by the federal government under the 1964 Urban Mass Transportation Act. The New Jersey Department of Transportation said that federal financial participation would be sought to help pay for the improvements outlined in the master plan.

● **"A major step forward."** The first of the 35 cars in the current order were introduced with proper fanfare to New Jersey residents starting on Sept. 11. At ceremonies heralding the acceptance of the initial cars, State DOT Commissioner David J. Goldberg described them as "a major step forward" toward the state's ultimate public transportation goal.

Should voters look favorably on the master plan, over $200 million of the $640 million package would be slated for public transportation, primarily for rail improvements. Among the major rail projects in the plan are:

— Addition of 45 more cars for operation on the Penn Central;

— A similar equipment program for the Erie Lackawanna, Central Railroad of New Jersey, and the New York & Long Branch Railroad;

— Electrification of a portion of the CNJ main line, along with the addition of track connections with both the PC and the Lehigh Valley;

— Electrification of a portion of the NY&LB, plus other improvements.

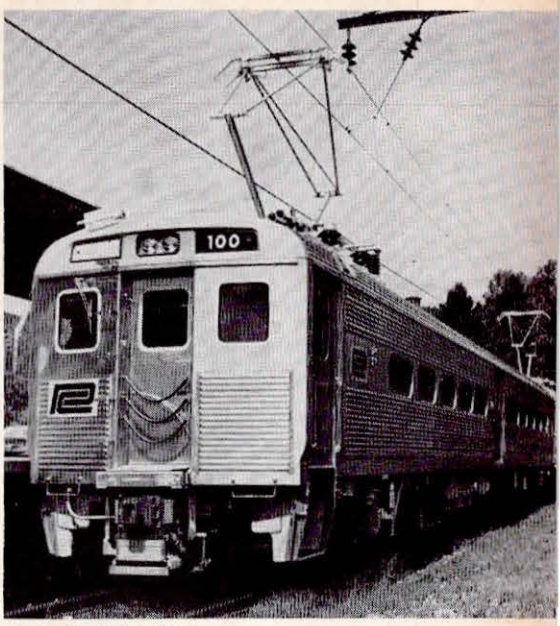
In terms of state expenditures, about half the amount planned for rail improvements will be for the EL and its commuters. Plans call for a fleet of about 100 high-speed electric cars, not unlike the ones now going into service on the PC, plus additional new coaches for operation on non-electrified lines.

● **The nation's fastest.** The present order of cars, which is expected to be fully on line before the end of the year, will be operated on the Penn Central between Trenton and New York City's Penn Station. Rated by the New Jersey DOT as the fastest commuter cars in the nation, they are expected to serve as the pattern for all future cars added to the state fleet.

If Garden State residents, in trying to come up with the $500 winner in the "Name the Car" contest (it was open to New Jersey residents only, ended Sept. 25), finally gave up in total frustration, it's no shame. The cars, which are 85 ft. long, 10 ft. 6 in. wide and 12 ft., 8 in. high, have many outstanding features.

after a standing start. Cars will run on Penn Central between Trenton and New York.

commuter cars"



Photos by Robert G. Lewis

The 26,000 commuters who travel daily between Trenton, New Brunswick, South Amboy and New York City are discovering that the electric powered cars can cruise along at up to 100 mph. To further add to the speed of the service, the cars are able to sprint out of the stations and reach a speed of 80 mph in just 70 seconds. Keys to the speed and pick-up of each of the $300,000 cars are the four high-performance integral motor-gear drives, called Tracpaks and developed by Westinghouse Electric. Each drive is rated at 175 hp, with a peak of 325 hp delivered during acceleration.

In general appearance and, to a certain degree, in structure, the New Jersey cars are similar to the 20 stainless steel commuter cars built last year by St. Louis Car Division for the City of Philadelphia and now operating on the Penn Central.

● **And sophisticated, too.** "In performance and equipment, the New Jersey cars are perhaps the most sophisticated commuter cars ever built," explained John Tucker, St. Louis Car Division's vice president-engineering. "They combine the passenger-loading features of transit cars with the comfort and speed of modern commuter cars."

He added that they may be the cars of the future, but then, in view of the many technological advances being made in rail cars today, qualified the statement by continuing, "at least in the near future."

Sophistication is built into the cars in many areas. Altogether, they have nearly 1,200 different electrical circuits. They are coming equipped with electro-mechanical automatic couplers similar to the ones being applied on the Northeast Corridor cars. They also have a new type of brake indication system which will signal the motorman if the brakes are malfunctioning.

● **Built for comfort.** In addition to being programmed for high-speed cruising, the cars also have a high comfort index. The car interiors, designed by Sundberg-Ferrar with the needs of weary commuters in mind, feature beige-and-blue color schemes throughout accentuated with wood grain finish highlights. The 118 contoured high-back seats, arranged with three seats on one side of the aisle and two on the other side, are designed to outline clearly each passenger space to assure privacy.

High-volume, low-velocity air conditioning, rated at 12 tons, along with the heating system, assure a fully controlled climate for year-around passenger comfort.

Each of the multiple unit cars is divided into two sections separated by a center vestibule. In the one section where smoking is permitted, simple but effective air fresheners are installed in the air circulation system to eliminate smoke pollutants.

Since stations along the Penn Central electrified system in New Jersey have both high and low passenger platforms, the cars were designed for easy accessibility at the stations. Equipped with both high-level center doors as well as combination high/low side doors located near the car ends, the cars allow riders to enter and leave with much greater ease than was possible with the older MU cars owned by the PC.

● **Riding on air.** The new cars have

(*Continued on page 25*)

Westinghouse ran Boston's rapid transit trains through the computer... and came out with major savings in cost, power and weight.

The Massachusetts Bay Transportation Authority has purchased rapid transit cars for its new 9.5-mile South Shore Line to specifications established with the help of Westinghouse Train Simulation computer program.

The studies covered interconnecting lines as well as the new line. We assisted MBTA in reducing car weight, size of the propulsion system, power consumption and maintenance costs, with a minor change in requirements. Total savings in cost, power, weight and maintenance come to millions of dollars during the life of the fleet. Pullman-Standard will supply 76 high-speed cars with Westinghouse Tracpak propulsion drives, controls and auxiliary power systems.

When you're planning a rapid transit system, let Westinghouse engineers supply the facts you need for a decision on optimum equipment specifications. We offer a full range of medium- and high-performance Tracpak propulsion units, auxiliary equipment and controls.

Call the Westinghouse transportation specialist in your area or write Westinghouse Electric Corporation, Transportation Division, Avenue A and West St., East Pittsburgh, Pa. 15112.

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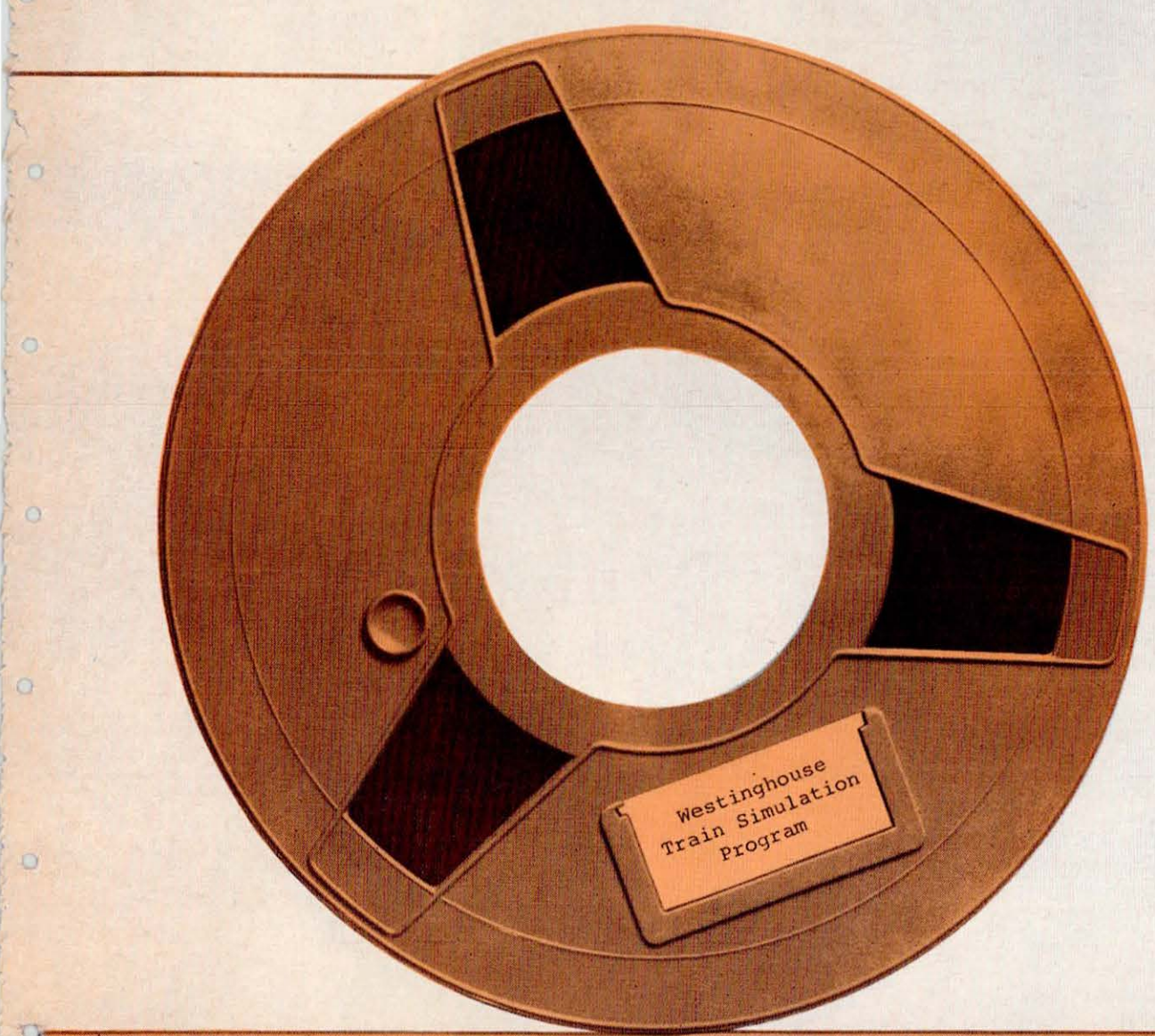

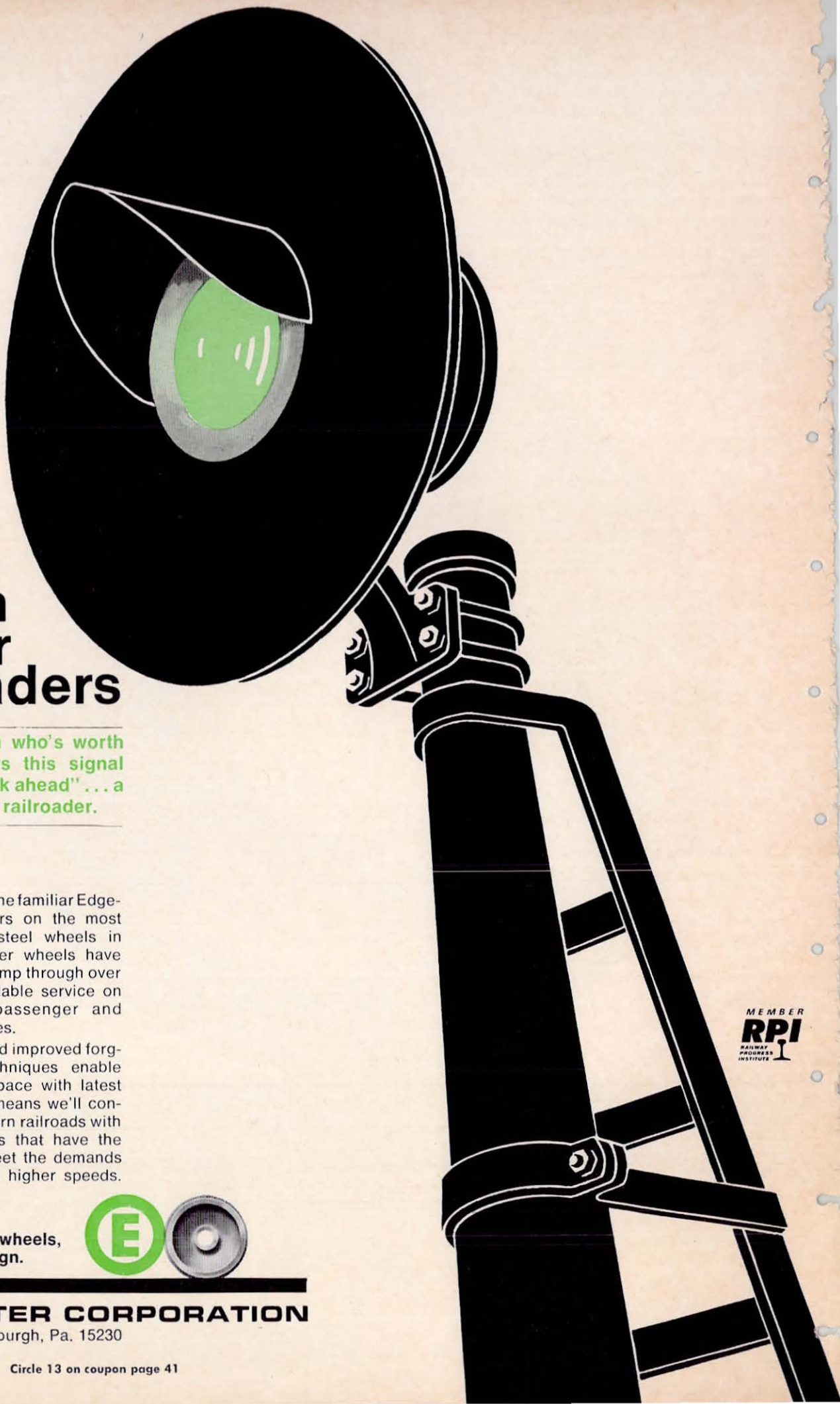

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Another good sign is the familiar Edgewater Ⓔ that appears on the most respected wrought steel wheels in railroading. Edgewater wheels have earned the quality stamp through over fifty years of dependable service on locomotives and passenger and freight cars of all types.

Constant research and improved forging and rolling techniques enable Edgewater to keep pace with latest developments. This means we'll continue to provide modern railroads with wrought steel wheels that have the added stamina to meet the demands of heavier loads and higher speeds.

When you want the highest quality wheels, rely on this good sign.

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Circle 13 on coupon page 41

STAINLESS STEEL IS DOMINANT THROUGHOUT THE CARS

(Continued from page 21)
over 300 more parts than the Philadelphia cars built last year by St. Louis Car Division. The center vestibule in the cars, plus the wide, automatic biparting doors at the center are accounting for the majority of these additional parts, according to Tucker. Furthermore, he added, the automatic doors, which feature Vapor door controls, were among the sophisticated items on the car which required many of the additional wiring circuits.

If commuters, in commenting on the travel comfort, say "it's like riding on air," they won't be too far wrong. An unusual measure of riding comfort—and safety—is gained in GSI's General-70 trucks which feature, among other things, all-air bolster springs to assure maximum stability at high speeds and under all operating conditions.

Stainless steel rules supreme throughout the car. With the exception of the draft sills, body bolsters and a few other end members, which are low alloy, high tensile steel, all other structural and body members are made of stainless steel. The center sill, a three-piece weldment, is made of stainless steel, as is the remainder of the underframe. The pre-assembled sides, combinations of both flat sheet and corrugated stainless steel, are stress-carrying members of the carbody, which was designed as a modified girder.

The roof, too, is made of stainless steel, and like the sides, it is pre-assembled in a mammoth spot welding positioner at the carbuilder's St. Louis plant.

● **Long life, low maintenance.** Stainless steel and aluminum are used extensively inside the cars. Luggage racks, the trim, the vestibules, the doorway thresholds—all are made of these metals. The sink and the forced air electric hand dryer in each car's modern toilet are stainless steel. All these low maintenance features were designed into the car to increase its service life and to reduce service and maintenance costs over its lifetime.

Safety and reliability are not taking a back seat to high speed and rider comfort in the cars, either. The solid tinted, neutral grey windows in the passenger compartments are made of heavy duty safety glass. Meanwhile, the front windshields are made of extra thick triple laminated safety glass, a full 9/16 in. thick.

In addition to the special brake indicator system, each car is equipped with a system which notifies the motorman of an open door in either the cab car or one of the trailing cars in the consist. Red lights come on on the car with the malfunctioning door, thus eliminating the time-consuming task of searching throughout the entire train consist for the problem. Furthermore, for added safety, each car is equipped with a "no motion switch." This, too, is coupled to the door operating mechanism and renders it inoperative while the cars are in motion. This control is effective even when the cars are coasting.

● **No wasted space.** To prevent a loss of passenger seating space, only the air conditioning system's evaporators are located in the passenger compartments, at the extreme ends of the cars. The two evaporators' common compressor is hung beneath the car. Each compartment's air circulating duct is divided diagonally along its length and coupled with the duct in the car's other compartment. This arrangement permits at least partial circulation of cooled air throughout the car should one of the two evaporators stop functioning. In addition to cooling the passengers, the clean-conditioned internal air is also used to cool the car's traction motors. A special duct leads from the car to each truck.

In selecting the car design, New Jersey officials showed a "plan ahead" attitude. The power transformers on the cars now reduce the catenary system's 11-kilovolt, 25-cycle energy to the lower operating voltage required. However, should the system be converted later to commercial electric power, the Westinghouse transformers on the cars can be changed easily to handle 25-KV, 60-cycle energy. To gather in this energy for operation of the units' various electrical systems, each is equipped with a Stemmann pantograph located on the roof directly above one of the trucks.

Principal dimensions of the 35 new cars: Length, over buffers and couplers, 85 ft; width, 10½ ft; height, rail to top of roof, 12 2/3 ft; truck centers, 59½ ft; side door opening, vestibules, 3 ft; side door opening, center, 4 ft., 2 in.; inside height, centerline of car, 7 ft, 1 in.; width, end door opening, 2½ ft; height, riser on passenger steps (approximate), 1 ft; capacity, seated, 118; lightweight (approximate), 115,000 lb.

● **Getting acquainted.** To give New Jersey residents an opportunity to become acquainted with the nation's newest commuter car fleet—and to stir up interest in the upcoming state bond issue—the state arranged for the initial cars delivered to be on display at key railroad stations throughout the commuter systems.

In urging voter support of the bond issue during the ceremonies held last month following the arrival of the first cars in the 35-car order, both Goldberg and Robert W. Minor, vice president-executive department, Penn Central, said that new equipment on the commuter lines in New Jersey is "critical to the welfare of all commuters in the state." If rider reaction to the new cars now operating could be the criteria for judgment by the voters, the bond issue will have solid backing. ■

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Component	Supplier
Trucks	Castings Division General Steel Industries, Inc.
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Luggage racks	Adams and Westlake Co.
Doors and trap door	O. M. Edwards Co., Inc.
Couplers	Symington Division Dresser Industries
Draft gears	National Castings Division Midland-Ross Corp.
Cab signalling	Signal and Communications Division Westinghouse Air Brake Co.
Seats	National Seating Division Artnell Co.
Journal bearings	Timken Roller Bearing Co.

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Today, Pullman-Standard PS-2SD Covered Hopper Cars serve the phosphate industry. They have low profile design, specially placed roof hatches, and maximum cubic capacities to achieve full transportation economies.

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CLEVELAND's
ANGRY MAYOR ASKS:

"Why build more roads for people who can't afford to buy gas?"

MAYOR CARL STOKES

Most mayors, in welcoming conventions to their cities, content themselves with telling their visitors, "You're doing a fine job; keep up the good work." But Mayor Carl Stokes departed from the script in welcoming the American Transit Association to Cleveland last month. He had harsh words for all of those who are dedicated to the when-in-doubt-pour-concrete philosophy. Excerpts from his address follow:

As Mayor of a city, I must view all aspects of that city in terms of how each part affects the whole. In these terms, transportation in Cleveland represents one of my biggest problems. In Cleveland, we are the victims rather than the beneficiaries of our transportation system.

•

Today, Cleveland's number one problem is unemployment. Many of the other problems like poor housing, high crime rates, soaring welfare rolls, broken homes will be alleviated if we get our unemployed people into jobs that will give them income and self-respect. However, the practical availability of jobs is in large part directly dependent upon the availability of transportation.

In Cleveland, all our roads and rails lead downtown and downtown doesn't have enough jobs to solve the problem. The places that can utilize the untrained are found in the peripheral areas of greater Cleveland where land is cheaper and there's more of it. While we have to get more industry into the inner city, we must also do something about linking up the unemployed in the ghettos with the factories in the suburbs.

As Mayor I don't much care how it's done, so I am open minded on the method. However, I honestly don't see how we're ever going to achieve this without a massive effort to provide the only kind of transportation these people can afford—and that is mass transportation. I fail to see the value of building more roads for people who can't afford to buy gas.

•

To far too many people these days, the word ghetto means black people, but the fact is Cleveland has one of the largest white ghettos in the country. We call it the Near West Side, and it has all the same problems, all the same frustrations as do the poverty areas on the East Side of Cleveland. So when I say ghetto, I mean all the blighted areas on both sides of the Cuyahoga River.

•

As Mayor looking at my number one problem—unemployment—I ask for mass transit.

But who do I ask?

City Council can't help me—mass transit costs too much for a city budget. It has been estimated that an adequate transit system for Cleveland would cost upwards of $200 million. The Federal government, while it spends billions on highways, has only paid lip-service to mass transit needs through the establishment of demonstration projects that aren't going to solve my problem in Cleveland.

As a former state legislator, I know the story in Columbus and it is even worse than the story in Washington. Ohio doesn't even have a Transportation Department. This state has lived with the concrete philosophy for so long that it doesn't even recognize mass transit as a subject worth the establishment of a department to deal with it.

We have a State Highway Department and that's what Ohio does. It builds highways—ribbons of concrete that link city to city and skirt traffic around the city limits, leaving the core to fend for itself. When the city is graced with a highway, it causes more problems than it solves. Highways displace people and the agencies that build the highways feel this displacement isn't their problem, but someone else's. This leaves a city administrator on one hand crying for more transportation and on the other hand fighting the concrete philosophy.

•

I think it must be admitted that your organization has failed so far to effectively face up to the fact that mass transit has always been the "poor relation" of the transportation world. Let's look at the results. The highway lobby in Washington is easily one of the strongest and biggest and is totally dedicated to laying more concrete and looks the other way at such highway-caused problems as air pollution, displacement of people, flagrant waste of our limited and valuable land. They have a very nice arrangement whereby tax money goes directly to highway development.

•

The automobile created an industry that helped build this nation and it has given each of us who own an automobile the possession of one of man's most remarkable and enjoyable inventions. But it is time this romance was tempered with a strong dose of reality. It's time we traded in the automobile for a more practical though admittedly less romantic mass transit vehicle whose virtues are that it does not pollute the air or require great gobs of land we no longer have nor is it at the mercy of stoplights, traffic jams and road repairs. And it carries not 1 to 6 people per trip but hundreds.

•

In terms of federal contributions we spend as much on highways every 25 days as we have spent in the nearly seven years since the Federal Urban Mass Transportation Act was passed. While billions of dollars are now available to streets and expressways, there is a long waiting list for a few million dollars for mass transit.

•

First, urban America needs a bill passed that will direct tax money into mass transit the same way money is now earmarked for highways. Second, states must follow the example of New York and New Jersey by establishing transportation departments that will provide the over-view needed to mix highway improvement programs with mass transit programs.

These two steps once taken will save this nation billions of dollars in reduced transit costs and at the same time help to alleviate the many urban crises caused by too many people jammed into too little space with no easy way to get out where the jobs are.

RESEARCH and
DEVELOPMENT
BACK UP the
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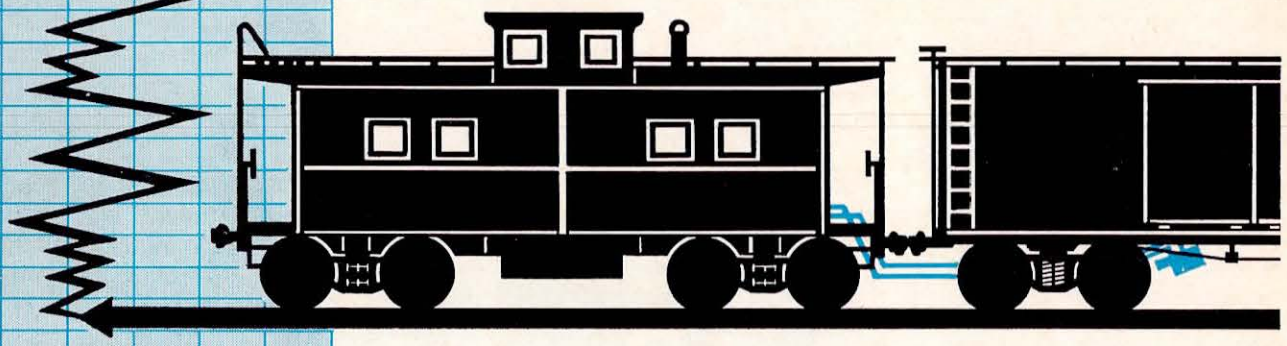
of the BARBER
STABILIZED TRUCK . . .



. . . ON THE TRACK
WHERE IT COUNTS

The "Total Design Concept" of the Barber Stabilized Truck is constantly being improved. These changes are the result of "on the track" research where advanced electronic equipment enables Barber engineers to observe and record performance under actual use conditions.

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TRANSIT ROUNDUP

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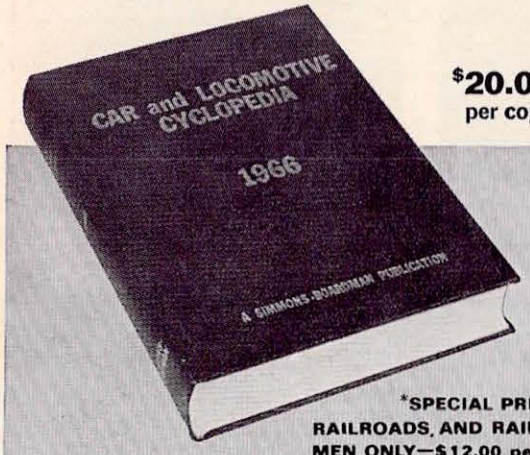

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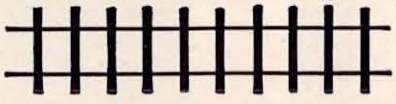

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BACK UP the
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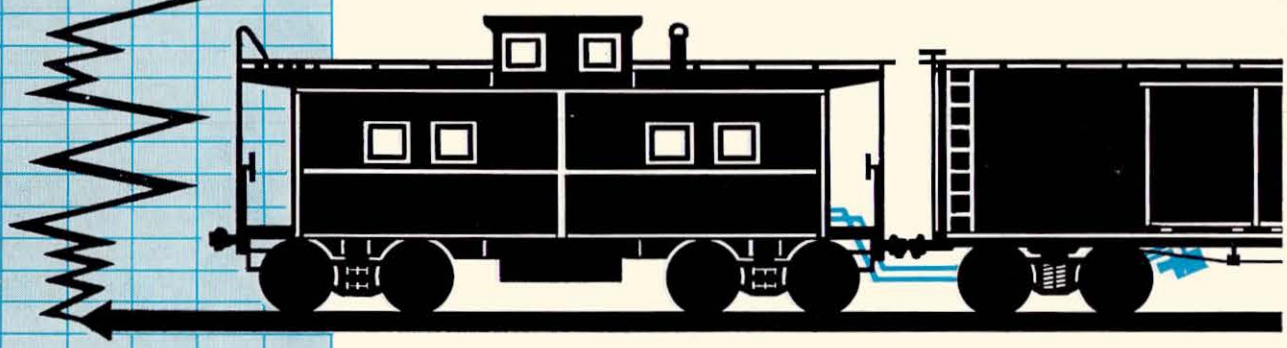
of the BARBER
STABILIZED TRUCK . . .



. . . ON THE TRACK
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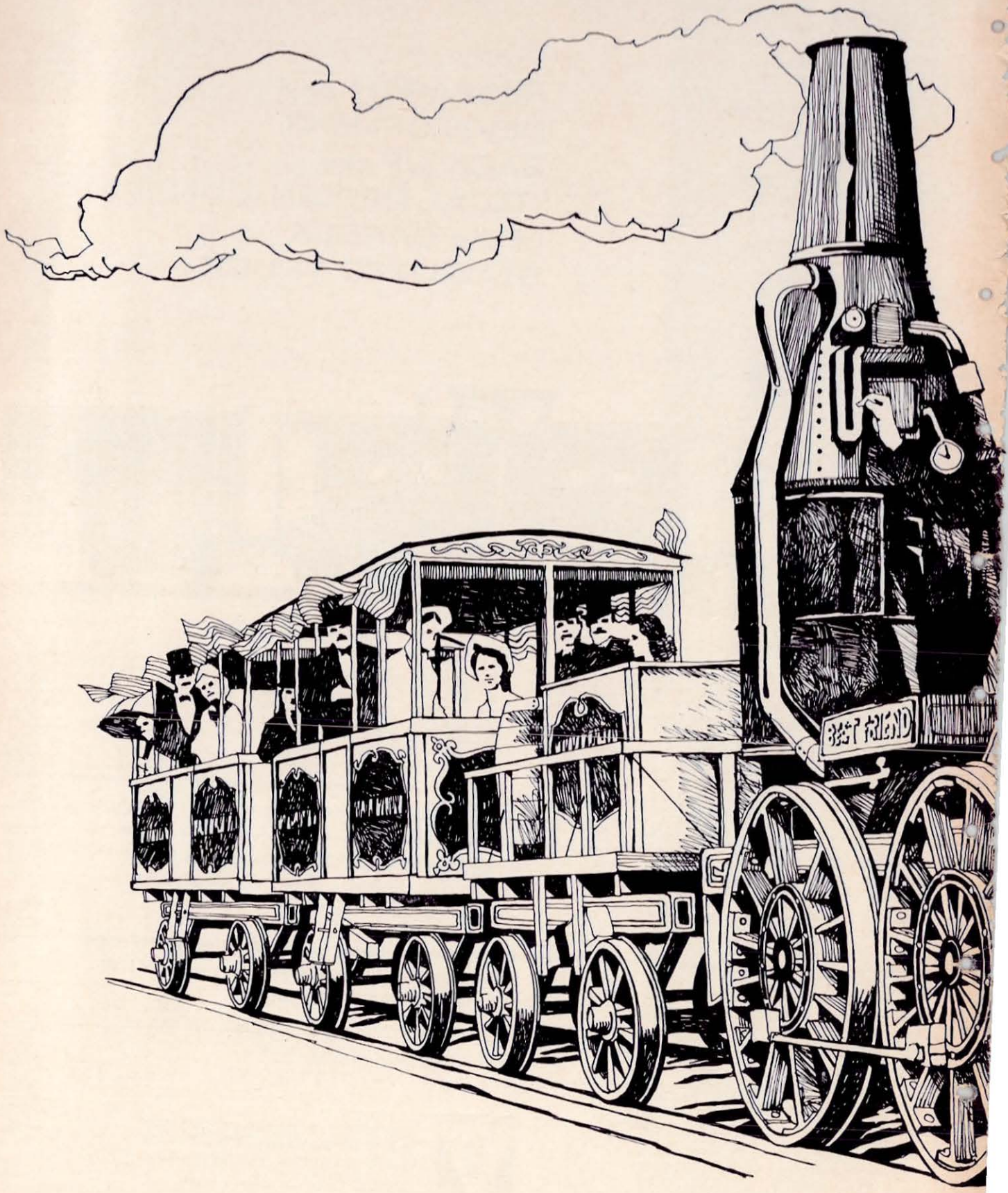
GROWTH OF A GREAT RAILROAD:
Southern Railway System

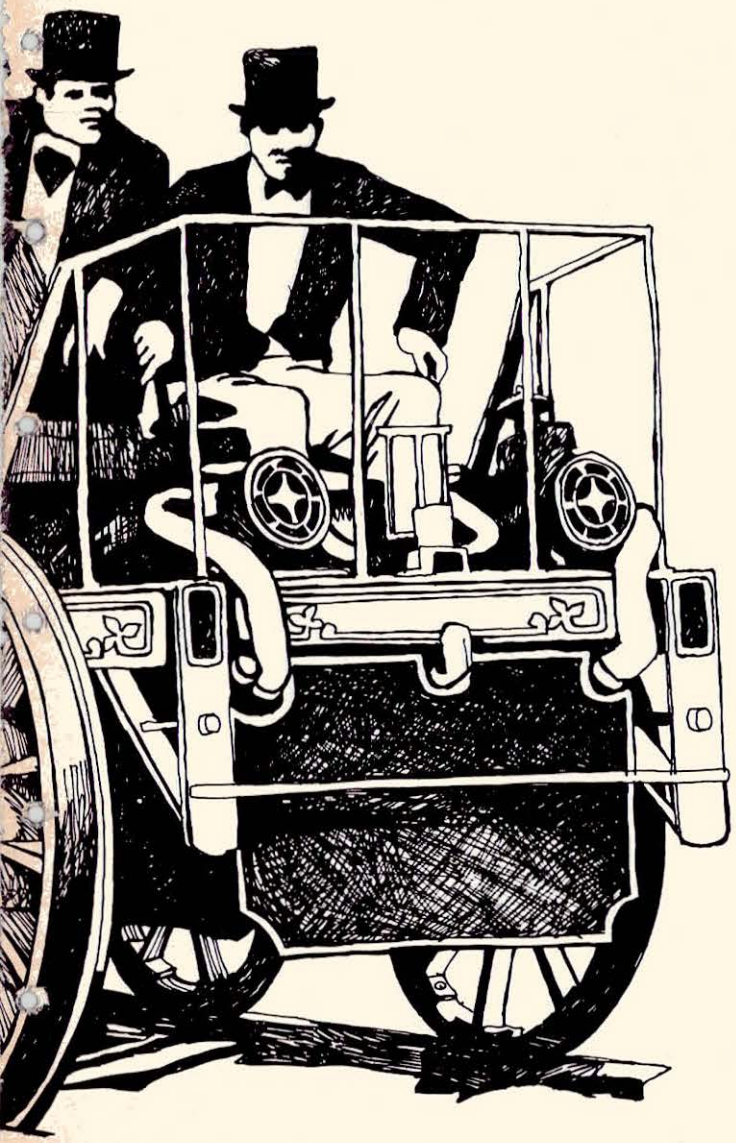


". . . flew on the wings of the wind at the speed of fifteen to twenty-five miles per hour, annihilating time and space and leaving all the world behind."

So a passenger commented on the first run of regular train service out of Charleston, South Carolina, Christmas morning of 1830. That smoking little engine had been christened "Best Friend of Charleston" - and it was to become just that, for the event signaled the start of regularly-scheduled steam railroad service in our young 28-state nation. Stretching 136 miles by the end of its third year, the little South Carolina Canal and Rail Road Company, which operated the "Best Friend" produced many "firsts" in railroad history. Today, that pioneer line is part of the vast Southern Railway System.

"Firsts" are a tradition for Southern Railway. The pioneering spirit of "Best Friend" continues, adding up to a lifetime of growth and progress. Being a best-friend has fostered many more "firsts"—Southern was first to buy a diesel-electric freight locomotive (1941), and the first major railroad to go all-diesel (1953).

Southern Railway System has a best-friend, too—they depend on Gulf for diesel fuels, lubricants—and, of course, for Gulf service.



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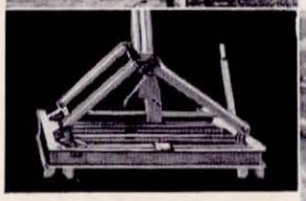
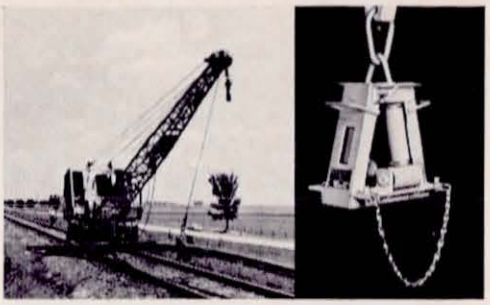
BURRO
TIME SAVERS!

New Burro Multiple Rail Lifter handles up to 8 rails and more per lift.

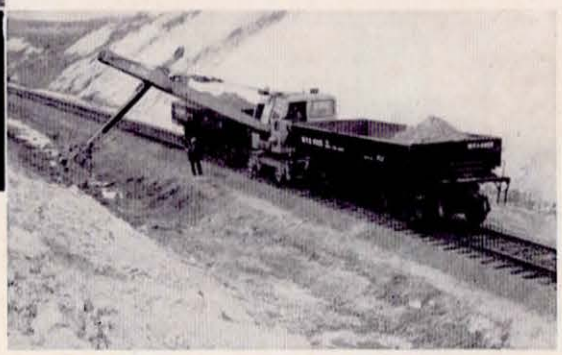
Model 40 Burro, equipped with automatic folding leads, shown driving piles with a diesel pile hammer.



This Model 40 Burro Crane using a Burro Panel Track Lifter picked up and loaded 106 completely assembled, 39' panel sections in less than 200 minutes.



Burro Rail Threader provides fast, efficient handling of continuous welded rail.



Model 40 Burro Ditcher supplies its own locomotive travel and work power. Ditcher loads the dump cars and furnishes necessary air for dumping.

Rugged and versatile, Burro Cranes and Equipment get the job done fast and efficiently, on the line, in the yards or Stores Department. Burro takes any job in stride. Pile driving, ditching, handling welded rail, multiple rail or panel track lifts is done quickly and economically. Pound for pound, there's more work power and versatility built into BURRO Cranes than any other unit.

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FreightMaster is 10 years ahead.

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WALTER TAFT

WATCHING WASHINGTON

INFORMALITY NOT ALWAYS SPEEDY—The ICC's informal docket procedure may be described generally as a plan for reducing the burden of litigation that would be involved if the same proceedings were on the formal docket. But some informal proceedings are converted into lengthy formal cases which end up in the courts. The Commission is now closing one of these—a case which took more than 20 years to run the course. It prompted a federal judge to warn that something may be "basically wrong," that the system may be in need of "a major overhaul."

ADMONISHER—The warning came from Judge Walter R. Mansfield of the United States District Court for the Southern District of New York. He bottomed it on an assumption that the case before him was "an example of delays attending invocation of the procedure within the administrative frame work established by the Commission." It was a case in which Thomson Phosphate Company was seeking reparations from the Atlantic Coast Line (now Seaboard Coast Line). Reparations are payments the ICC may require railroads and some other carriers to make to shippers damaged as a result of carrier violations of the Interstate Commerce Act—usually the charging of unreasonable rates.

GUIDELINES AND FINDINGS—In sending the case back to the Commission, Judge Mansfield also said: "Laudable as these procedures may appear on the surface, their apparent advantages appear to be outweighed by the development of a cumbersome administrative quagmire bordering on the moribund." The Commission did not appeal. So it is disposing of the Thomson claims with benefit of guidelines set out by the court. The court also ruled on applicability of the statute of limitations to situations where, as here, an unsuccessful informal complaint is succeeded by a formal complaint. The ruling is that "an informal complaint is a pending 'proceeding' . . . and a formal complaint covering the same subject matter is 'the same proceeding.'"

SECOND GO-AROUND—This case came in the aftermath of a 1966 decision of the United States Supreme Court in a case based on the same reparations matters. That raised, for the first time, the question of whether a railroad may sue to set aside a Commission reparations order. The Supreme Court said it could not. That kept a carrier's recourse restricted as it has always been—to a right to refuse payment and defend such refusal if sued by the shipper.

Skokie gets them coming and going

(Continued from page 19)

cess from highways is essential at the outlying terminal.

—Use of existing rail right-of-way can bring substantial savings in the public investment.

—A modest public investment and application of conventional rapid transit technology can create a new transport service for a medium-density suburban area, with proper planning.

● **Employment boost.** Finally, the report says, "Rapid transit extension to suburban areas can open job opportunities . . . for less-advantaged, inner-city residents without autos for travel to new suburban plants."

The reasons behind the turnaround in patronage on a previously luckless route include speed, frequency, relatively new equipment, convenience for park-and-ride users, community support, intense promotion, and "values added to the service by the riders."

Krambles explains that last reason like this: "A characteristic of marketing is that the user himself imparts a beneficial quality to a service. Stated another way: 'Success breeds more success.' Once we learn how to harness this peculiarity, hopefully, we will reverse the tendency of public transportation to serve an ever-diminishing volume from the ever-expanding total market for urban travel."

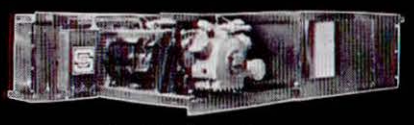
● **Big rush-volume not needed.** Operating with a rush-hour volume of 1,500 riders, Skokie Swift widely misses the 10,000-to-40,000 peak previously set by transit planners as needed to justify rail rapid transit. The higher figure "has been commonly accepted to limit rail transit application to a few dense travel corridors in cities of a million or more people," the report says. It adds, however, that residents of less populated areas also seek alternatives to driving that are tuned in to current standards of speed, convenience and reliability.

Transit planners recommend buses only for rush-hour loads of 5,000, but the Swift provides higher-quality service than buses, the report says. "The question of whether buses could move the volume seems unimportant if they do not generate it, as was the case of the bus service available in the Skokie corridor before the Swift was started." The failings of bus service were overcome by a "modest" improvement in several elements of conventional rail transit, the report says.

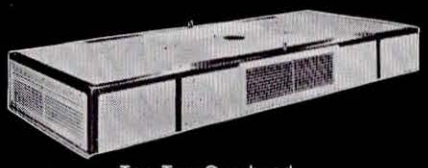
Rules for estimating traffic, spacing stations and special operations formed from the Swift experience were applied in planning the Kennedy and Dan Ryan expressway extensions of CTA. ■

DESIGN

No matter what the car construction, "Safety" has designs for an air conditioning system to meet your needs. These systems can be adapted to any of the varying concepts of modern transit car design.



Ten Ton Underframe
Package Unit Complete



Ten Ton Overhead
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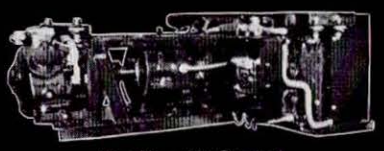
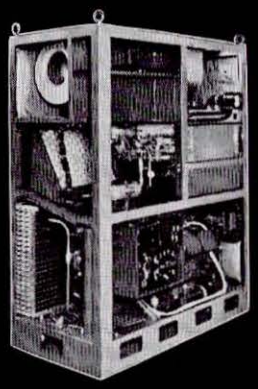


Ten Ton Air Cooled
Condenser and Compressor Unit



Five Ton
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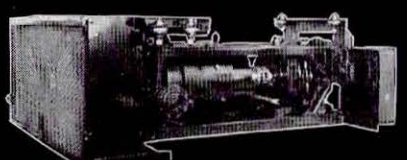

Nine Ton Air Cooled Condenser
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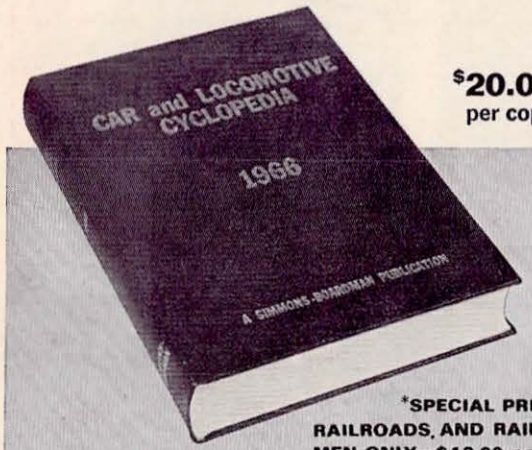

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Circle 24 on coupon page 41

John S. Reed
Santa Fe

P. H. Van Gorp
WP

PEOPLE

JERSEY CENTRAL.—Theodore M. Welch, superintendent of special services, will direct the new Customer Service Bureau at Newark, N.J. With the aid of recently-installed automated equipment in yards and at Newark, the new bureau is better equipped to furnish car information faster than ever before.

LEHIGH VALLEY.— Robert K. Lloyd appointed Canadian traffic manager, Toronto, Ont.

SANTA FE.—John S. Reed, president, also named chief executive officer. **Ernest S. Marsh,** chairman of the board and chief executive officer, continues as chairman of the board.

Kenneth E. Broxterman, general freight agent (commerce bureau), Chicago, named assistant to general freight traffic manager there, succeeding **John P. McElree,** retired. **James A. Stevenson,** general freight agent, Chicago, replaces Mr. Broxterman, and in turn is succeeded by **R. E. Beard,** assistant general freight agent, Dallas. Mr. Beard's successor is **Bryan V. Monahan,** office manager for the vice president-traffic, Chicago.

UNION PACIFIC.—Robert J. Tucker named to the newly created position of industrial agent, Cheyenne, Wyo.

WESTERN PACIFIC.—P. H. Van Gorp named executive assistant to the president, to succeed **D. L. Loftus,** appointed assistant vice president of intermodal services.

OBITUARY

J. Edward Goggin, 52, general attorney, **Milwaukee,** died Aug. 31 at his home in Chicago.

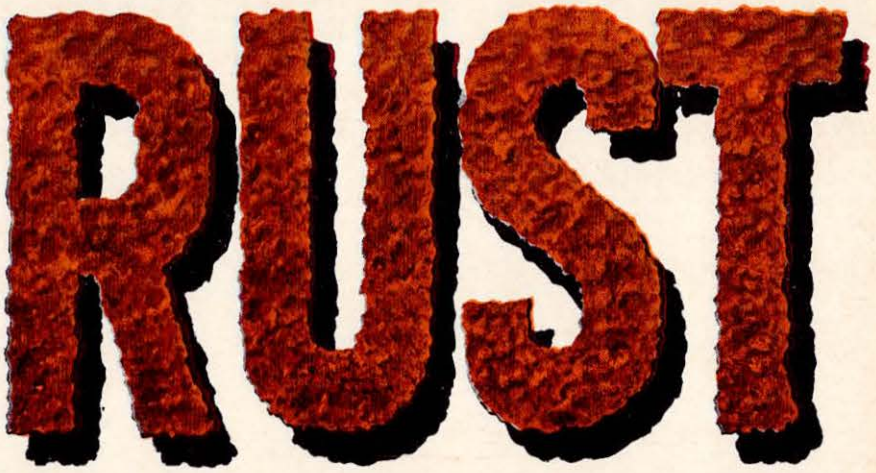
Joseph A. Kummerer, 74, retired vice president-purchasing, **Pullman-Standard** division of **Pullman Inc.,** died Sept. 25 in Little Company of Mary Hospital, Chicago.

Lee Spencer, 75, consultant on railroad track problems, and former track supervisor, **Long Island,** died Sept. 25 in Doctor's Hospital, Phoenix, Ariz.

Harold W. P. Wiss, 54, recently appointed vice president—commercial relations, **Westinghouse Air Brake Division, WABCO,** died in Chicago on Sept. 17. Mr. Wiss had been manager, Western District Office, Chicago, for 15 years.

maintenance tips

NO. 9
IN A SERIES



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Arresting corrosion is a full time, road-wide job. It is a job Oakite is equipped to help you tackle and lick.

For example, there are Oakite products that protect even as they clean. (Residual protection guards against rust between operations, and over weekends.) For parts in storage or transit, there are Oakite products for short or long-term protection, indoors or out. For metal to be painted there are Oakite protective coatings to bar under-paint attack.

And, if rust gets to you before we do, Oakite has an assortment of products for removing it. So instead of budgeting for corrosion, do as Luke says, bank on Oakite. Like railroad tracks, Oakite service is everywhere.

TIP OF THE MONTH

New Anti-corrosion Coolant for Grinding and Machining.

Pass this one along to your shop superintendent. Oakite Formula C is a new and really different synthetic coolant that, in addition to cooling and cleaning metal, also inhibits corrosion for protection between operations and during limited storage. In addition to extraordinary heat transfer properties, Oakite Formula C is transparent, for greater machinist visibility. It is odor and smoke free. Longer tool life is assured. Oakite Formula C also has detergent properties, for removal of oils, lubricants, chips, other shop soils. This is one product you should see in action. Write me and I'll be glad to arrange a demonstration.

LUKE BOWNE, *Manager*
Transportation Division

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OAKITE Est. 1909 SCIENCE

Circle 20 on coupon page 41

Rice lists goals for data systems

SCL president tells Chicago meeting that 10 challenges must be met for railroads to reap the full benefits from data systems.

One of the greatest challenges for today's railroads, it's said, is the need for industry-wide cooperation to attack the common problems. Evidence of such cooperation was abundant in the speeches, workshops and papers at the AAR Data Systems Division annual meeting in Chicago, Sept. 23-25.

Keynote speaker W. Thomas Rice, president of Seaboard Coast Line, listed ten challenges which must be met to reap the full benefits from data systems:

—"The capability of classifying, scheduling and monitoring the movement of every car over the railroad. When we have this capability, we can forecast empty availability of loaded cars when they are received from connections or loaded on line, thereby predicting car shortages or surpluses. Simultaneously, we will be able to simulate the effect of train operations and traffic flow on connecting yards and main lines."

—"Material and supply inventory control by computer. This can reduce the amount of money that we tie up in this account and assure availability of materials and supplies in required numbers when needed throughout the entire property."

—"Rail life predicated on gross ton-miles can be projected and intelligent maintenance practices can be inaugurated and replacements programmed years in advance."

—"Automatic car identification as an integral part of the data systems can result in open records being reduced to a minimum and greatly reduce labor and cost in knowing where equipment is and how rapidly it is being moved."

—"Rates and tariffs can be computerized to offset the drastic shortage of qualified rate clerks as well as to reduce costs."

—"Cost data can be made available quickly on the movement of a certain type of traffic to determine if rate reductions are possible to meet a particular competitive situation."

—"Earnings of various types of rail freight equipment can be determined and used as a guide for the next equipment order that will result in the greatest return."

—"Forecasting of equipment life and obsolescence can be used as a guide to replacement and facilitation of capital-expenditure budgets years ahead."

—"Budget control can become realistic, and management will know at the end of a day the cost of running the railroad as well as revenues that have been derived therefrom."

—"Utilization of the national computer systems as now envisioned by the AAR can result in national interline revenue and equipment hire settlements rather than on an individual basis."

Several of these challenges are being met in whole or in part on individual railroads. But evidence is piling up that inter-road coordination and cooperation is also progressing in these areas.

TRAIN and ACI are well under way, and a December delivery is anticipated for the IBM 360/40 computer at AAR's new Washington headquarters.

● **Shipper sees progress.** Kenneth L. Vore, vice president traffic and transportation, U. S. Steel Corp., mentioned evidence of industry-wide cooperation in his comments to DSD members: "Your Data Systems Division cuts across departmental lines."

Vore said he liked the railroad's emphasis on the "customer" and the appointment of "an Ad Hoc Committee on Shipper-Carrier Data Systems for the express purpose of working jointly with shippers and the Traffic Committee on Data Services in areas involving exchange of information between railroads and your customers."

Also, Vore said that shippers would like to work with the railroads. For example: "For those of us that have a car-location system that is on stream, we have one plea. Let us join hands with you, and standardize the header format and message content.

"A new non-profit organization, the Transportation Data Coordinating Committee, was given birth on May 1 for the purpose of serving as a clearinghouse for resolution of data problems involving all of the modes of transportation and the users of their services, as well as governmental agencies. You obviously are also believers, as two members of your Data Systems Division are directors of TDCC. We have the structures and the expertise. Let's put them to work to our mutual benefit. Neither of us can afford to go our separate and individual ways."

Vore urged that railroad sales-marketing organizations and shippers' traffic organizations encourage a direct rapport between the data-processing/communications technicians on both sides.

● **Challenges too.** U.S. Steel's traffic and transportation vice president issued other challenges to be met by railroads: "Our interest," he said, "is not confined to the manner in which you, as a single railroad, handle our car. Rather, we look at the total record, origin carrier, intermediate carrier and delivering carrier. When it is laid down at our customer's front door is what really counts."

The computer can give an excellent record of poor service, but it alone is not the panacea for solving all car movement problems: "Obviously, major surgery in terms of improved operating service and performance is required by management, but the computer offers great potential as a diagnostic tool."

● **Computer usage.** Vore outlined several uses of computers that could be advantageous. Computers, he said, could be used to determine the most efficient routes for freight cars. Also, computer usage could determine clearance of oversize loads.

"The computer could be used to assist you in determining the types of commodities that account for most of the damage and their contribution to your revenue. Furthermore, data by commodity, geographical location, car type, packaging and loading methods, could be quickly searched out by the computer for management analysis and corrective action." ■

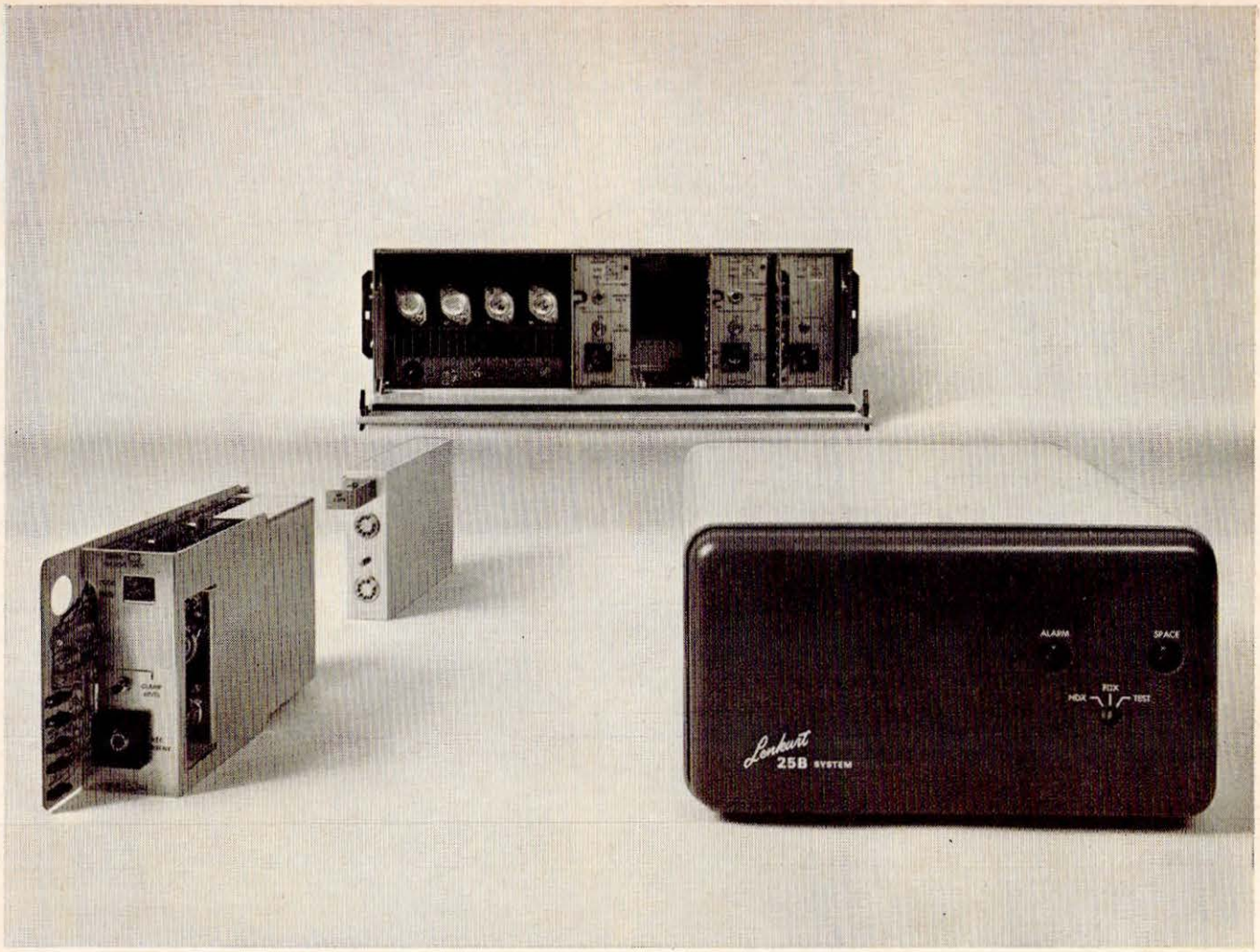
60 roads participate in TRAIN

AAR's TeleRail Automated Information Network will operate 24 hours daily, seven days per week, when it's operational in 1970. Robert B. Curry, AAR vice-president, management services department, reports that an IBM 360/40 computer with 2314 and 2311 disk files will be delivered to AAR's new headquarters building in December of this year.

The TRAIN system will handle 180,000 cars involved in about 5,000-6,000 interchange moves daily. TRAIN's computer is expected to receive 200 messages daily.

Terminal equipment used will include IBM 1050s, AT&T's TWX and Data Speed units, and Western Union's Telex service. Magnetic-tape units may be used by large railroads. The terminal equipment used will depend upon the size of the railroad or number of cars interchanged that it will be reporting.

Disclosure is expected to be on car ownership and traffic originating road.



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With the 25B, you get unmatched flexibility both in types of channels and in equipment arrangements. Plug-in filters give you a choice of five channel spacings and related data speeds – from 120 Hz for 75 b/s to 1020 Hz for 600 b/s. Compared to similar systems, you get about 20% more speed for a given channel spacing.

For single-channel operation, all you need is a pair of compact, self-contained modems working end-to-end. For multichannel applications, use two sets of terminal equipment. Or you can use terminal equipment to work into modems at several remote locations.

There are added benefits. Like three-frequency operation – ideal for on-hold-off applications. Like built-in test facilities. And many others.

Want more facts? Just call or write Lenkurt Electric Co., Inc., San Carlos, California.

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Subsidiary of
GENERAL TELEPHONE & ELECTRONICS

Circle 21 on coupon page 41

Eye appeal and wear resistance make the ideal combination for modern transit flooring. Decorator Transit-Flor offers 20 marbleized color patterns, plus 12 terrazzo styles, to blend or contrast in new or existing interiors. Low-maintenance rubber stands up to grueling wear, foul weather . . . and even supplies best resistance to cigarette scorch. Rubber's natural resilience provides underfoot safety . . . in double-grooved rub or smooth surface flooring. Step treads come in blending or matching colors.

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THE R.C.A. RUBBER COMPANY

an Ohio Corp. of Akron, Ohio

1833 E. Market St., Akron, Ohio 44305

The Leader in Rubber Transit Flooring & Step Treads

Circle 22 on coupon page 41

AS THE EDITOR SEES IT

THE ICC'S BOMBSHELL—The old saw that statistics don't lie, but statisticians do, contains (as do most old saws) a grain of truth. That grain was all but lost last week in the welter of publicity that followed the release of an ICC study which found (as a New York Daily News headline-writer interpreted it) that "Passenger trains make money."

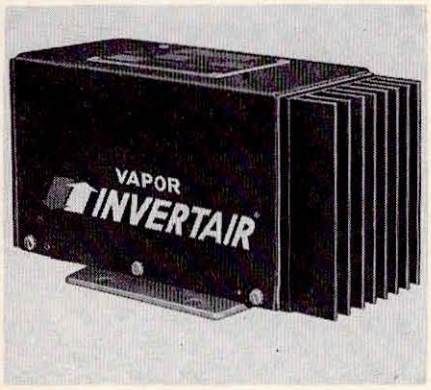
THE NEW MATH—What the ICC report actually said was that in eight of the last 14 years, railroad passenger revenues exceeded the operating expenses "related solely to passenger and allied services." This "excess" of income over outgo ranged from a low of $11 million in 1959 to a high of $78 million in 1962. The ICC's "new math" statisticians (as the AAR promptly dubbed them) conceded that in 1967, the railroads had lost $72 million, even on the "solely related" basis, and that deficits were also recorded during the period 1954-1958.

AND THE OLD MATH—What the ICC didn't bother to point out, but the AAR did, is that one of the Commission's "old math" practitioners—in a landmark report issued 10 years ago—said without equivocation: "The passenger deficit is not something which can be conjured away by statistical legerdemain."

REBUTTAL—As the AAR pointed out, the new ICC study "conveniently" ignored the taxes and rents which are directly related to passenger operations and which cannot legally be charged to anything else. Said the AAR: "That's like figuring up the family budget without including the mortgage payment and the grocery bill—or assuming the cost of driving a car depends solely on the price of gasoline. You can't stay solvent that way for very long." The AAR went on to say that the ICC has previously stated that solely related operating expenses—plus taxes and rents—represent as a minimum the expenses which should be covered by passenger service revenue, and: "Even this comparison does not allow for any return on investment and equipment and road property used exclusively for passenger service."

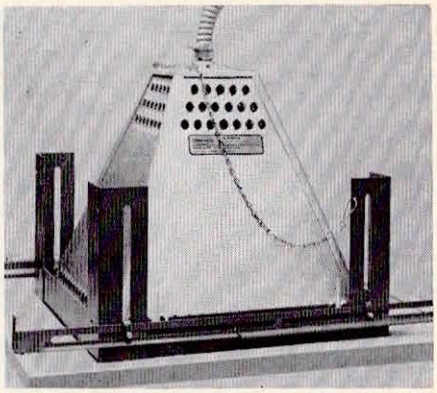
GET TOUGH WITH WHOM?—There is the uncomfortable feeling among railroad men that the ICC's headline-hunting expedition of last week is part of a new "get tough" policy with the industry on passenger service. But who is the ICC really getting tough with if it pursues the "new math" policy so bizarrely laid bare last week? Not with railroad managers alone—but with all transportation users, who must ultimately pay for those items which the ICC so conveniently excludes. One thing is certain: a press campaign of half-truths is not going to solve the problem. —**L.S.M.**

NEW PRODUCTS REPORT



Inverter (RA-1)

The 100-VA Invertair static inverter for powering rapid-transit control equipment inverts d-c voltage to a-c voltage by means of solid-state circuitry. The unit has no moving parts. It operates on input voltage of 36 volts d-c while producing output voltage of 115 volts a-c ± 10%. Outputs are square wave. The unit may also be applied to other uses requiring a-c current from d-c current—up to 100 VA power capability. *Vapor Corp.*



Recessing frame (RA-2)

The Wide-Lite universal recessing assembly can be used in most acoustical ceilings and in ceilings with wood joists. It permits relamping of mercury vapor indoor luminaires from above or below the suspended ceilings. The UL-listed frame recesses 1000, 400 and 250-watt indoor luminaires and is supplied with flexible coupling and safety chain. The frame can also be used for mounting fixtures supported by standard lowering devices. *Wide-Lite Corp.*

Engine alarm system (RA-3)

Used in conjunction with a relay, the Merc sensor of the Tem-an-Level two-way engine alarm system automatically gives drivers of transit vehicles or trucks advance warning of low water level, overheated engines, hydraulic oil temperature and level, oil low in crankcase, and fuel level. The unit, featuring audio, visual, or engine shutdown warning, retains its setting within 0.1 deg F. The system is available in 12, 24, 64, and 100 vdc. *Vapor.*

Coaxial multiplex (RA-4)

A coaxial transmission system capable of handling up to 600 multiplexed voice-frequency channels on two coaxial tubes is designated the 46C. It is equally well suited for interconnection of microwave radio and multiplex facilities, for expansion of high-density communications routes in frequency congested areas, or for terminal-to-terminal medium haul communications of 100 miles or more.

The 46C, which coordinates with Lenkurt's type 46A multiplex system and other similar systems meeting CCITT and Bell System specifications, operates with standard 0.174-inch and 0.375-inch coaxial tubes.

The Lenkurt 53C order wire system provides a 1.8 kHz voice circuit, and the transmission coupling for up to five tone signaling circuits for the supervisory system at terminal locations.

The supervisory system of the 46C uses time division multiplexing to transmit 30 independent alarms per tone signaling frequency. Additional shelves can be added for monitoring up to a total of 150 alarms. *Lenkurt Electric Co.*

Signs (RA-5)

Safety-Plate Signs, made of clear, .005-inch-thick polyester film in various sizes, are said not to peel, crack or delaminate. Bright colors and legends are said to be fade resistant. Heavy-duty adhesive backing bonds the signs to clean, dry surfaces such as paint, plaster, wood, metal, glass and plastic. Eighty-one stock signs are available. They are divided into two groups: Basic Purpose Signs and Specific Purpose Signs. *W. H. Brady Co.*

RAILWAY AGE
THE TRANSPORTATION WEEKLY

30 Church Street, N.Y., N.Y. 10007 READERS' SERVICE (Att. J. Lindstrom)

PLEASE SEND ADDITIONAL INFORMATION ABOUT PRODUCTS IN ADVERTISEMENTS NUMBERED: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

PLEASE SEND INFORMATION ABOUT PRODUCTS DESCRIBED ON PAGE 41 MARKED: RA-1 RA-2 RA-3 RA-4 RA-5

NAME ..... TITLE .....

COMPANY .....

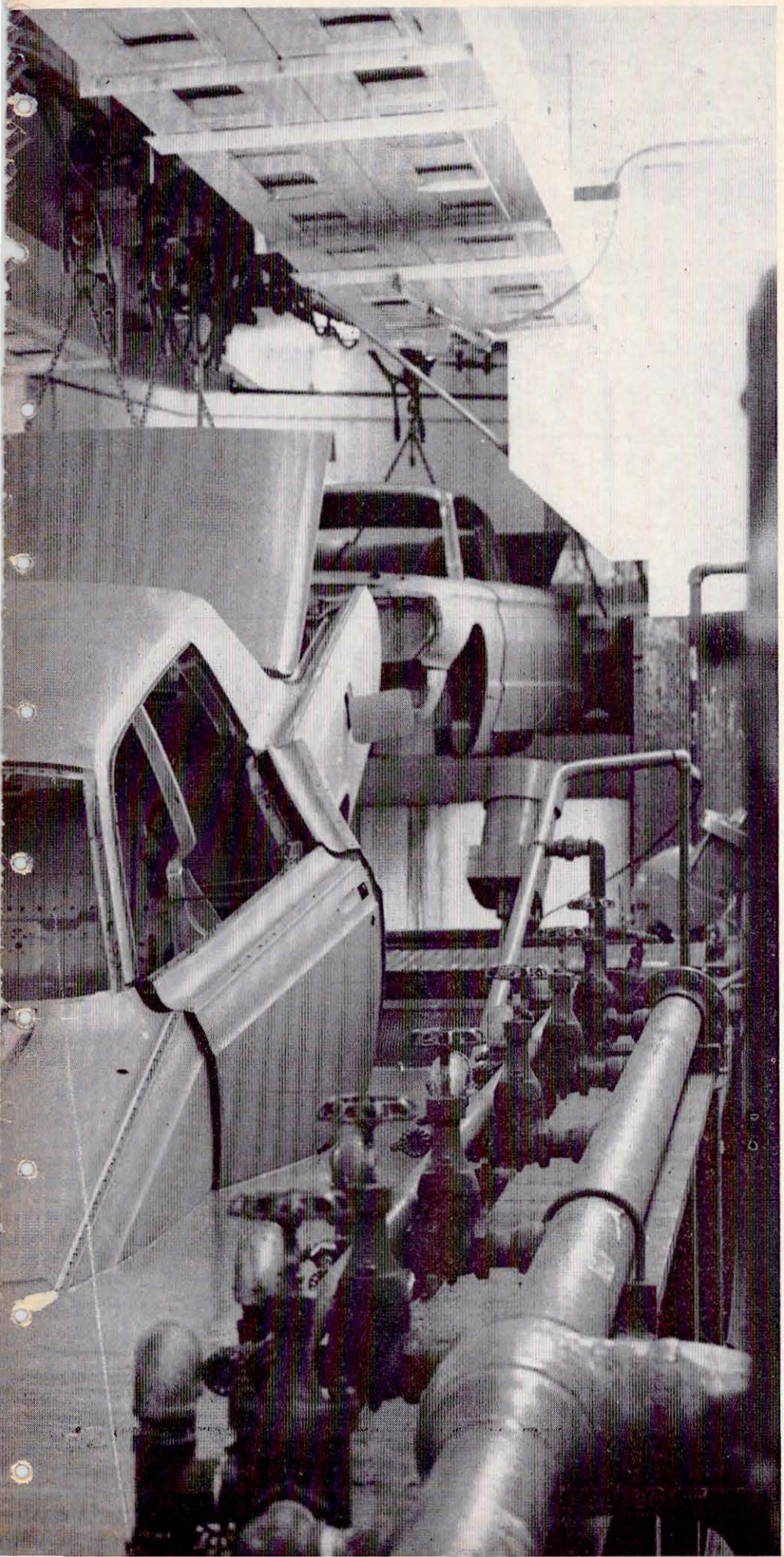
ADDRESS .....

CITY ..... STATE ..... ZIP .....

• Inquiries can be processed only if title and company are shown. 10/7/68

The railroad idea: key

to our automated future



See the overhead track guiding those bodies through the rust-proofing tank? No one has to cock an eye or lift a finger.

We need *more* of this!

For America to hold its own in the world, fewer of our people must perform simple, mechanical-style functions that machines perform better and at lower cost —more people must be efficiently applied to making things and performing services of which we don't have enough.

That means automation. And automation means *guided movement* the railroad idea.

Take away a factory's assembly line, conveyors, transfer machines, the guiding slides on which tool heads travel—and you can forget automation. Without guided movement, a factory's sensing devices and programming equipment would be useless.

In the transportation field, scientists struggle to develop a practical guidance system for cars and trucks. Guiding trolleys? Electronic guidelines buried under the pavement? The complexity of the total problem is staggering.

Actually, the railroad—with its inherent and fantastically efficient guided movement system —its rails—is best qualified to be the basic mass transportation system of the future.

But railroaders are not resting on the classic advantages of the train. They're developing new ones all the time . . . giant unit trains . . . new loading and unloading devices . . . a whole new spectrum of specialized cars . . . new signaling, communication, computerization . . . welded rail . . . new m/w machines . . . new—you name it!

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the transportation weekly

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MARKET OUTLOOK

CARLOADINGS

Loadings of revenue freight in the week ended Sept. 28 totaled 593,378 cars, the Association of American Railroads announced on Oct. 3. This was an increase of 7,753 cars, or 1.3%, compared with the previous week; an increase of 7,705 cars, or 1.3%, compared with the corresponding week last year; and a decrease of 20,016 cars, or 3.3%, compared with the equivalent 1966 week. Ton-miles generated by carloadings in the week ended Sept. 28 are estimated at 15.2 billion, an increase of 3.1% above the corresponding week of 1967, and 0.3% below the 1966 week.

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, Sept. 28

District	1968	1967	1966
Eastern, including Allegheny and Pocahontas	230,726	230,806	239,647
Southern	131,133	120,151	118,537
Total Eastern and Southern Districts	361,859	350,957	358,184
Northwestern	77,964	84,857	94,025
Central Western	112,514	109,949	120,213
Southwestern	41,041	39,910	40,972
Total Western Districts	231,519	234,716	255,210
Total All Roads	593,378	585,673	613,394
Commodities:			
Grain and Grain Products	43,882	47,504	53,114
Livestock	2,247	2,637	3,146
Coal	115,867	109,817	111,701
Coke	6,318	6,695	7,643
Forest Products	45,348	41,987	40,031
Ore	44,512	42,867	55,529
Merchandise l.c.l.	4,443	4,498	6,762
Miscellaneous	330,761	329,668	335,468
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Aug. 31	573,795	572,461	613,968
Cumulative total, 39 weeks	21,142,872	20,979,299	22,140,681
Estimated revenue ton-miles (billions) 39 weeks	557.7	536.1	552.4

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U. S. piggyback loadings for the week ended Sept. 21 totaled 28,937 cars, carrying 46,499 trailers, compared with 25,916 cars, carrying 43,261 trailers, in the corresponding 1967 week. Loadings for 1968 up to Sept. 21 totaled 966,628 cars, carrying 1,570,947 trailers, compared with 864,982 cars, carrying 1,421,353 trailers, in the corresponding period of 1967.

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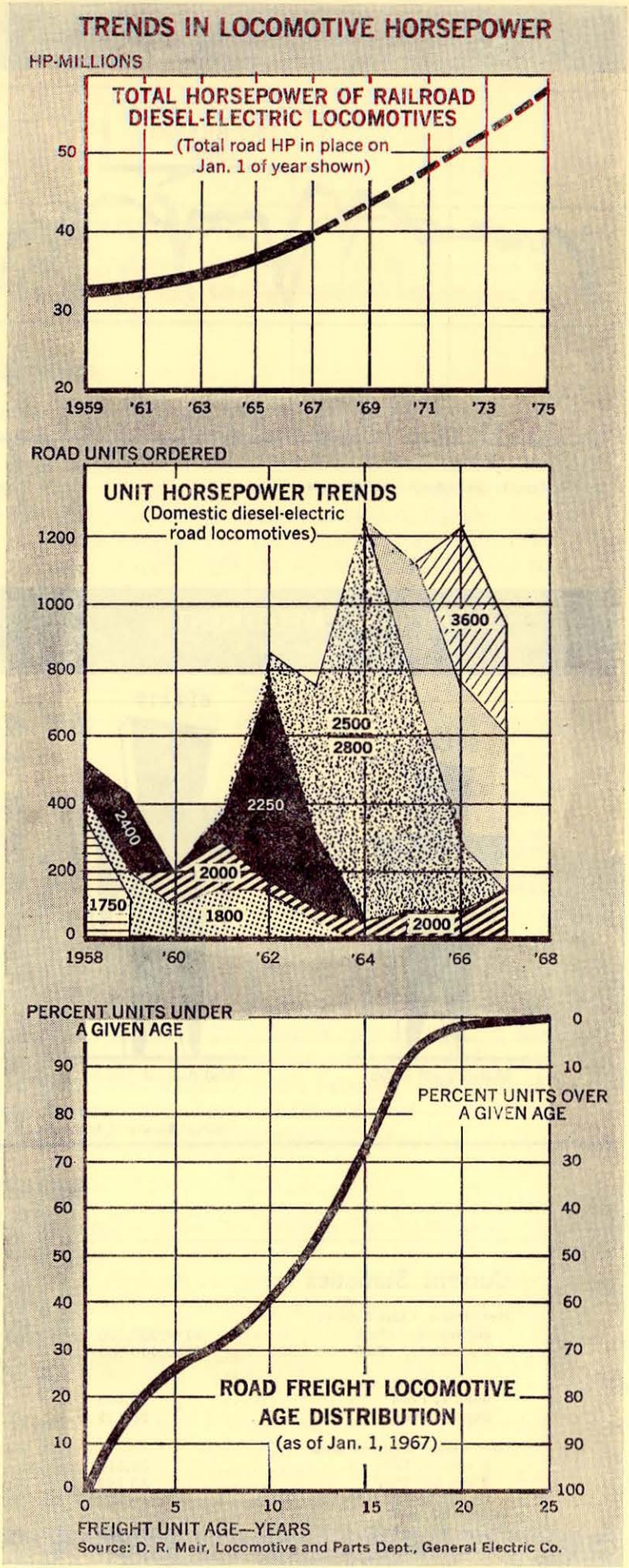


YOU OUGHT TO KNOW

A new record for piggyback: 28,937 cars

Piggyback loadings for the week ended Sept. 21 rose to 28,937 cars—a new record. The previous record, 28,117 cars, was established in the week ended June 29 (RA, July 15, p. 10).

North American Rockwell making offer for Abex

Illinois Central Industries and Abex Corp. have arrived at a preliminary agreement on merger—and now North American Rockwell is coming in with its own share-exchange proposal for Abex. North American Rockwell, a highly diversified corporation with 1967 sales of about $2.3 billion, had previously talked merger with Abex, but discussions were terminated before the Abex-ICI agreement was reached (RA, Sept. 23, p. 65).

FMC chief cites key rail role in "land-bridge"

What is required to bring the "land-bridge" concept out of the idea stage and into reality? Federal Maritime Commission Chairman John Harllee addressed himself to the question in a speech at San Diego last week. Said Harllee: "For a service that has yet to produce one container load of traffic, I dare say that the United States land-bridge concept, between Europe and Asia, has kept more rate-and-planning people burning midnight oil than anything else in the transportation field in recent times." As Harllee saw it, the railroads hold the key and "they must participate in the establishment of rate structures that will enable a shipper to transport his goods cheaper and faster than by an all-water route."

Order backlog for freight cars drops to 22,496

Orders were placed in August for 3,156 new freight cars—a slight increase over the 2,792 new cars ordered in July, but substantially below the 6,322 orders placed in August 1967, according to the American Railway Car Institute. Orders for rebuilds in August totaled 600, compared with 1,523 in July and 160 in August 1967. The backlog of new cars on order and undelivered on Sept. 1 was 16,256, compared with 16,943 on Aug. 1 and 26,166 on Sept. 1, 1967.

Simplicity and General Steel talk merger

General Steel Industries disclosed last week that agreement has been reached "in principle" for the acquisition of Simplicity—a manufacturer of conveying, screening and crushing equipment—by GSI through an exchange of stock. GSI's 1967 sales totaled $89 million; Simplicity had sales of $6.5 million for the year ended June 30, 1968.

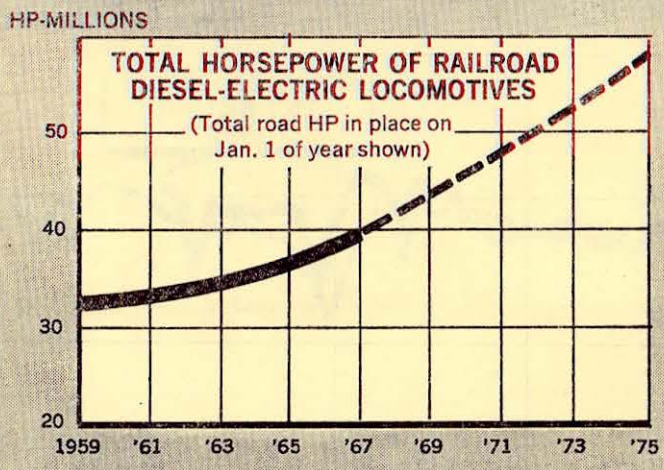
New honors for a veteran railroader

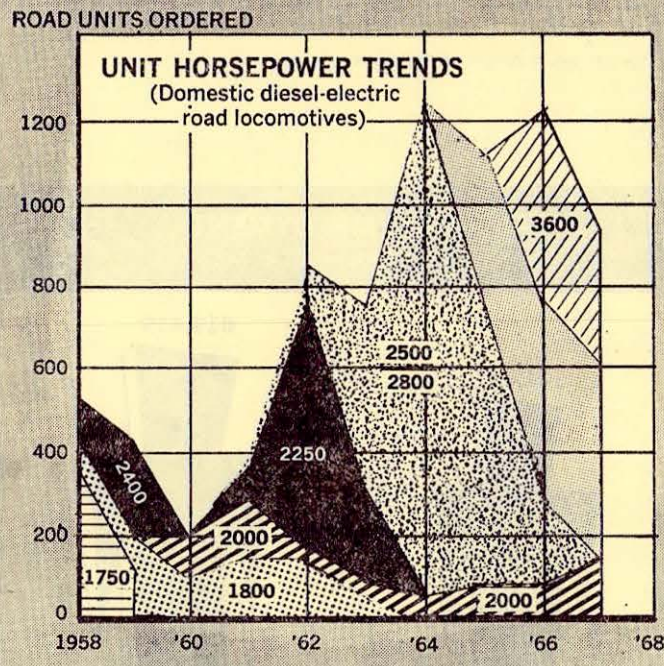
No longer will Rock Island's strategic classification yard at Silvis, Ill., be known simply as Rock Island's yard at Silvis. From now on, it's Kelly Yard—honoring G. W. Kelly, senior vice president-operations, who will retire Oct. 31 after 52 years in the railroad industry. With the exception of three years as general manager of the Texas Mexican, Kelly had spent his entire career with Southern Pacific before he joined Rock Island in 1965 as vice-president—operations. Said RI President Jervis Langdon, Jr., "Mr. Kelly has provided a blueprint for efficient operations, not only for the present but for the future as well."

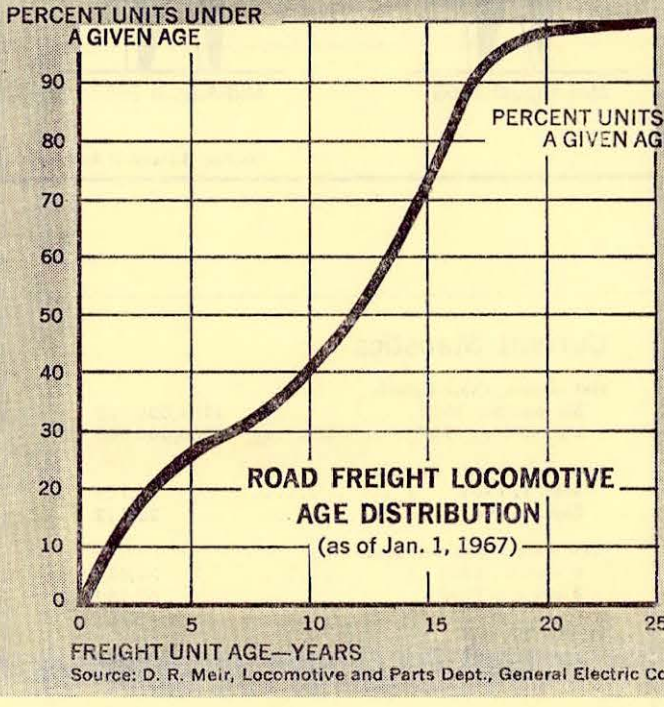
PORTEC, Inc. will move from Loop

PORTEC, Inc. has announced that it will move its headquarters office from the Railway Exchange Building in the Chicago Loop to a new company-owned building under construction in Oak Brook, a Chicago suburb.

TRENDS IN LOCOMOTIVE HORSEPOWER



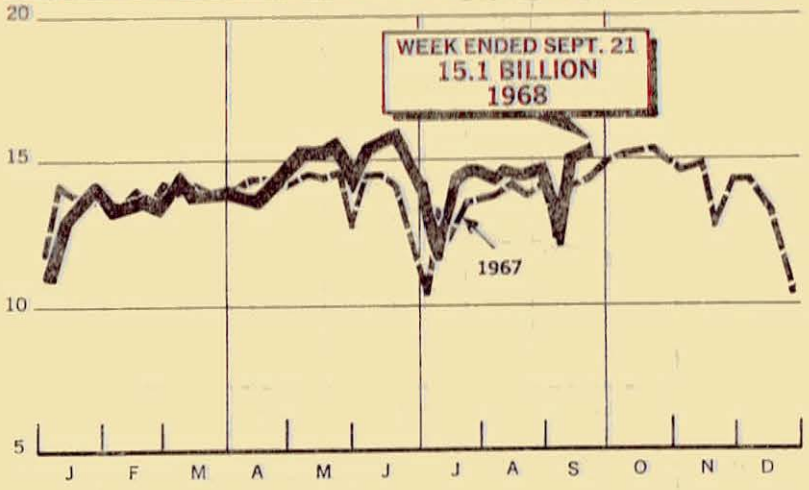




Source: D. R. Meir, Locomotive and Parts Dept., General Electric Co.

RAIL FREIGHT TRAFFIC TRENDS

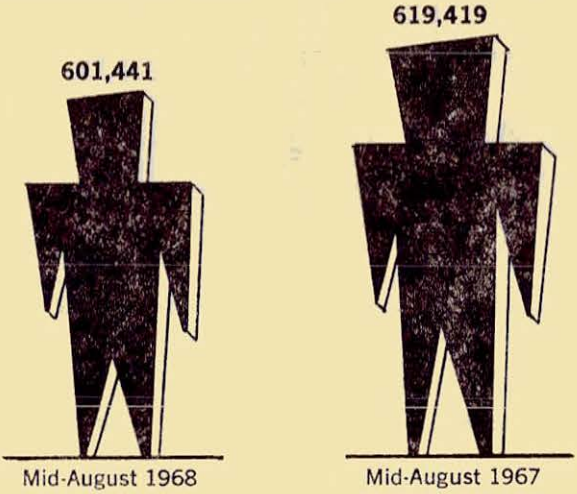
BILLION TON MILES (Estimated)



Source: Association of American Railroads

RAILROAD EMPLOYMENT

(CLASS I LINE-HAUL RAILROADS)



Mid-August 1968 Mid-August 1967

Source: Bureau of Accounts, ICC.

Current Statistics

Net income, Class I roads	
Six months, 1968	$284,000,000
Six months, 1967	$265,000,000
New freight cars on order	
Sept. 1, 1968	16,256
Sept. 1, 1967	26,122
New freight cars delivered	
8 months, 1968	38,614
8 months, 1967	60,189
Serviceable cars	
Sept. 1, 1968	1,388,680
Sept. 1, 1967	1,413,272

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CAPITAL EXPENDITURES

• *Union Pacific.*—Budgeted $97 million for the purchase of 4,154 new freight cars and 25 diesel-electric locomotives in 1969.

CAR OWNERSHIP

• *Serviceable cars.*—Revenue freight cars in serviceable condition owned by Class I railroads on Sept. 1 totaled 1,388,680, compared with 1,413,272 on Sept. 1, 1967, according to most recent AAR Car Service Division report. Estimated total ownership of all railroad- and privately-owned freight cars on Sept. 1 (see table below), was 1,805,433 (average capacity: 63.84 tons), compared with 1,828,911 (average capacity: 62.36 tons), on Sept. 1, 1967.

ESTIMATED OWNERSHIP—ALL REVENUE FREIGHT CARS
(Sept. 1, 1968 vs. Sept. 1, 1967)

		Box	Covered Hopper	Gondola	Hopper	Flat	Refrig.	All Others	Total
Class I	1968	554,429	123,076	199,698	413,807	67,637	51,726	56,993	1,467,366
	1967	574,063	117,611	203,632	423,500	66,377	50,971	59,524	1,495,678
RRO&C Refrig.*	1968	0	0	0	0	0	49,560	0	49,560
	1967	0	0	0	0	0	52,161	0	52,161
Private.	1968	1,246	28,207	286	3,833	41,550	14,828	172,737	262,687
	1967	1,251	26,907	654	1,926	38,887	14,272	171,072	254,969
Class II & S&T†	1968	9,084	889	5,071	8,307	590	789	1,090	25,820
	1967	9,235	850	5,321	8,305	659	618	1,115	26,103
GRAND TOTAL	**1968**	**564,759**	**152,172**	**205,055**	**425,947**	**109,777**	**116,903**	**230,820**	**1,805,433**
	1967	**584,549**	**145,368**	**209,607**	**433,731**	**105,923**	**118,022**	**231,711**	**1,828,911**

* Railroad owned and controlled refrigerator car lines.
† Class II railroads and switching and terminal companies.

TRANSIT

• *Chicago Transit Authority.*—A contract has been awarded to Luminator, Inc., of Plano, Tex., for supplying lighting fixtures for the tunnel portions and station platforms of the new Kennedy and Dan Ryan Rapid Transit extensions of CTA. A total of 2,500 fixtures are covered in the contract—more than 600 tunnel lights and 1,900 8-ft platform fixtures.

NEW FACILITIES

• *Canadian National.*—Called for tenders for construction of a container-handling express facility on a 60-acre site along the main line near Sudbury Junction. The existing downtown express facility at Sudbury is being abandoned to help make way for a $15-million urban renewal development project.

FOREIGN

• *India.*—Western Railway is tendering for supply and erection of seven 132 kV/25 kV traction substations on the Virar-Sabarmati section of WR. Tender papers available from Engineer-in-Chief, Virar-Sabarmati Railway Electrication, WR, Churchgate, Bombay, at Rupees 100 per copy. Bid deadline, Dec. 31.

YOU OUGHT TO KNOW

A new record for piggyback: 28,937 cars

Piggyback loadings for the week ended Sept. 21 rose to 28,937 cars—a new record. The previous record, 28,117 cars, was established in the week ended June 29 (RA, July 15, p. 10).

North American Rockwell making offer for Abex

Illinois Central Industries and Abex Corp. have arrived at a preliminary agreement on merger—and now North American Rockwell is coming in with its own share-exchange proposal for Abex. North American Rockwell, a highly diversified corporation with 1967 sales of about $2.3 billion, had previously talked merger with Abex, but discussions were terminated before the Abex-ICI agreement was reached (RA, Sept. 23, p. 65).

FMC chief cites key rail role in "land-bridge"

What is required to bring the "land-bridge" concept out of the idea stage and into reality? Federal Maritime Commission Chairman John Harllee addressed himself to the question in a speech at San Diego last week. Said Harllee: "For a service that has yet to produce one container load of traffic, I dare say that the United States land-bridge concept, between Europe and Asia, has kept more rate-and-planning people burning midnight oil than anything else in the transportation field in recent times." As Harllee saw it, the railroads hold the key and "they must participate in the establishment of rate structures that will enable a shipper to transport his goods cheaper and faster than by an all-water route."

Order backlog for freight cars drops to 22,496

Orders were placed in August for 3,156 new freight cars—a slight increase over the 2,792 new cars ordered in July, but substantially below the 6,322 orders placed in August 1967, according to the American Railway Car Institute. Orders for rebuilds in August totaled 600, compared with 1,523 in July and 160 in August 1967. The backlog of new cars on order and undelivered on Sept. 1 was 16,256, compared with 16,943 on Aug. 1 and 26,166 on Sept. 1, 1967.

Simplicity and General Steel talk merger

General Steel Industries disclosed last week that agreement has been reached "in principle" for the acquisition of Simplicity—a manufacturer of conveying, screening and crushing equipment—by GSI through an exchange of stock. GSI's 1967 sales totaled $89 million; Simplicity had sales of $6.5 million for the year ended June 30, 1968.

New honors for a veteran railroader

No longer will Rock Island's strategic classification yard at Silvis, Ill., be known simply as Rock Island's yard at Silvis. From now on, it's Kelly Yard—honoring G. W. Kelly, senior vice president-operations, who will retire Oct. 31 after 52 years in the railroad industry. With the exception of three years as general manager of the Texas Mexican, Kelly had spent his entire career with Southern Pacific before he joined Rock Island in 1965 as vice-president—operations. Said RI President Jervis Langdon, Jr., "Mr. Kelly has provided a blueprint for efficient operations, not only for the present but for the future as well."

PORTEC, Inc. will move from Loop

PORTEC, Inc. has announced that it will move its headquarters office from the Railway Exchange Building in the Chicago Loop to a new company-owned building under construction in Oak Brook, a Chicago suburb.

"Never you mind 'bout that new Servo display system you're gettin' next month—right now, start walkin' and don't stop till you find the hot box!"

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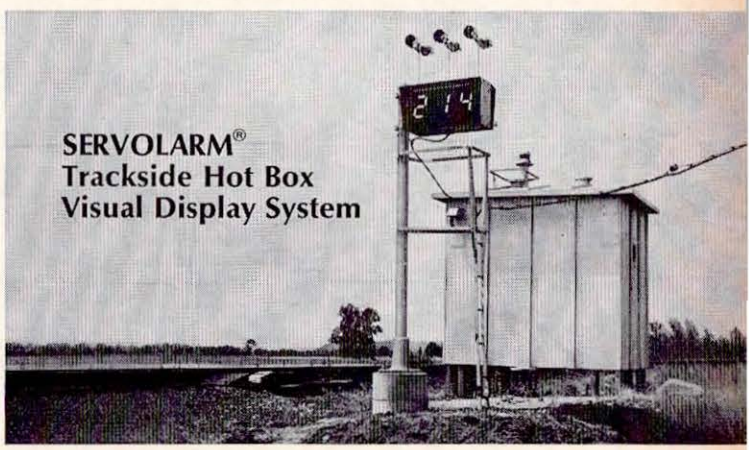

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MEMBER RPI

Circle 10 on coupon page 41

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TRANSIT

Richard J. Bouchard and **Robert A. Keith** have been named assistants to the president, **Alan M. Voorhees & Associates, Inc.** Mr. Bouchard is engaged in technical study for planning future public transportation in the Minneapolis-St. Paul urban area. Mr. Keith is engaged in major studies for the firm in Atlanta, Ga., and Newcastle, England.

Y. T. Sasaki has been appointed projects engineer, **Marin County Transit District,** San Rafael, Calif. Mr. Sasaki has worked as an industrial designer, product planner and urban transportation planner.

SUPPLY TRADE

James J. Chavis has been appointed director of sales, **Magor Railcar Division, Fruehauf Corp.,** Clifton, N.J. Mr. Chavis was formerly director of sales Chicago Railway Equipment Division, Evans Products Co.

Andrew H. McEachron has been appointed vice president of sales, **Gould Marathon Battery Co.,** a division of **Gould-National Batteries, Inc.** Mr. McEachron, who has been vice president sales, **Marathon Battery Co.,** a recent Gould-National acquisition, will have headquarters in St. Paul.

Anthony Blanco has been elected vice president—sales, **CTI-Container Transport International Inc.,** at New York. Mr. Blanco will be responsible for the sales program of both CTI and its affiliate CLC-Container Leasing Corp., throughout the United States. He was with the Grace Lines for 13 years where his principal responsibility was the education of shippers on the advantages of containerization.

Jack E. Rupp, manager of market planning, **General Railway Signal Co.,** Rochester, N.Y., has been appointed head of the Atlanta office. **Frederick W. Smallenburg** has been appointed sales operations specialist, Rochester.

A. E. Olson has been appointed manager, Pacific Region, **REALCO,** San Francisco, Calif. Previously, he was a district manager working under direction of the Western regional office in Chicago.

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VIEWPOINT

The Mayors tackle some concrete issues

Mayor Carl Stokes of Cleveland does not believe that the answer to his city's transportation problems is going to be found entirely inside a concrete mixer. And he has said so, in strong language (*page 28*).

Addressing the American Transit Association's annual convention, Mayor Stokes had angry words for the highway lobby and for the ATA itself, which he accused of having "failed so far to effectively face up to the fact that mass transit has always been the poor relation of the transportation world."

Mayor Stokes said bluntly that it's time to trade in the automobile for a more efficient means of transport—"for a mass transit vehicle whose virtues are that it does not pollute the air or require great gobs of land we no longer have nor is it at the mercy of stoplights, traffic jams and road repairs."

Similar noises have come recently from other mayors across the land. Mayor Joseph Alioto of San Francisco, fighting steamroller efforts to push a freeway through public parkland, warned the highway camp: "You have overreached yourselves . . . When you get a complex of truckers, tire companies, concrete companies, oil and gas companies, you have one of the most powerful lobbies in the U.S."

New York Mayor John V. Lindsay was one of the first high-ranking public officials to come out against the highway lobby's pet project of the year—the so-called "Big Truck" bill (S. 2658) which is now halfway through Congress.

For Mayor Stokes the problem is one of mass transit. For Mayor Alioto, it is the sacrifice of parkland to the concrete octopus. For Mayor Lindsay, it is the prospect of rubber-tired "trains" cluttering up the Interstate Highway System.

For the nation, the problem is one of sane transportation policy —which requires a balanced mixture of mass-transport and private-transport facilities—vs. the concrete-and-rubber lobby, which is committed entirely to the latter.

Mayor Stokes complained that Cleveland has become the victim, rather than the beneficiary, of transportation. That is terribly close to the truth for the nation as a whole.

THE HIGHWAYMEN REACT

Clearly, the highway lobby—after years of having things its own way—is now in trouble. The American Trucking Associations recently placed advertisements which attempted to trace this trouble to the highwaymen's arch-competitors, the railroads. As the truckers see it, present difficulties with the "big truck" bill stem from a series of articles published by Scripps-Howard newspapers—and furthermore, the truckers say these Scripps-Howard papers have "strong financial and directorate ties" with railroads. So the truckers, having themselves been accused of buying votes, reply with "you're another."

No one has yet dared to suggest that Mayors Stokes, Alioto and Lindsay are controlled by the railroads. The question now is: Are the Mayors ready to do more than talk? Political muscle helped build the highway lobby. It is going to take political muscle to help tame it. The Mayors have it. Will they use it?

on guard... in nuclear plants

This is an end view of the source chamber section of a mass spectrometer. The instrument identifies and counts the isotopes in analyzing samples of atomic fuels. White heat reduces the samples to an ionized gas. Measurement of the beam's intensity indicates the quality of the fuel. Specially engineered cladding provides the very utmost in protection.

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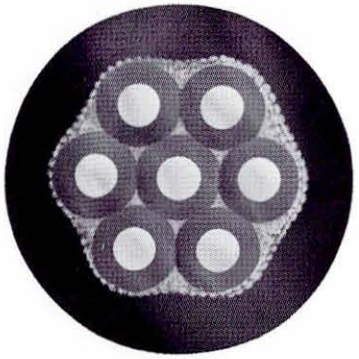

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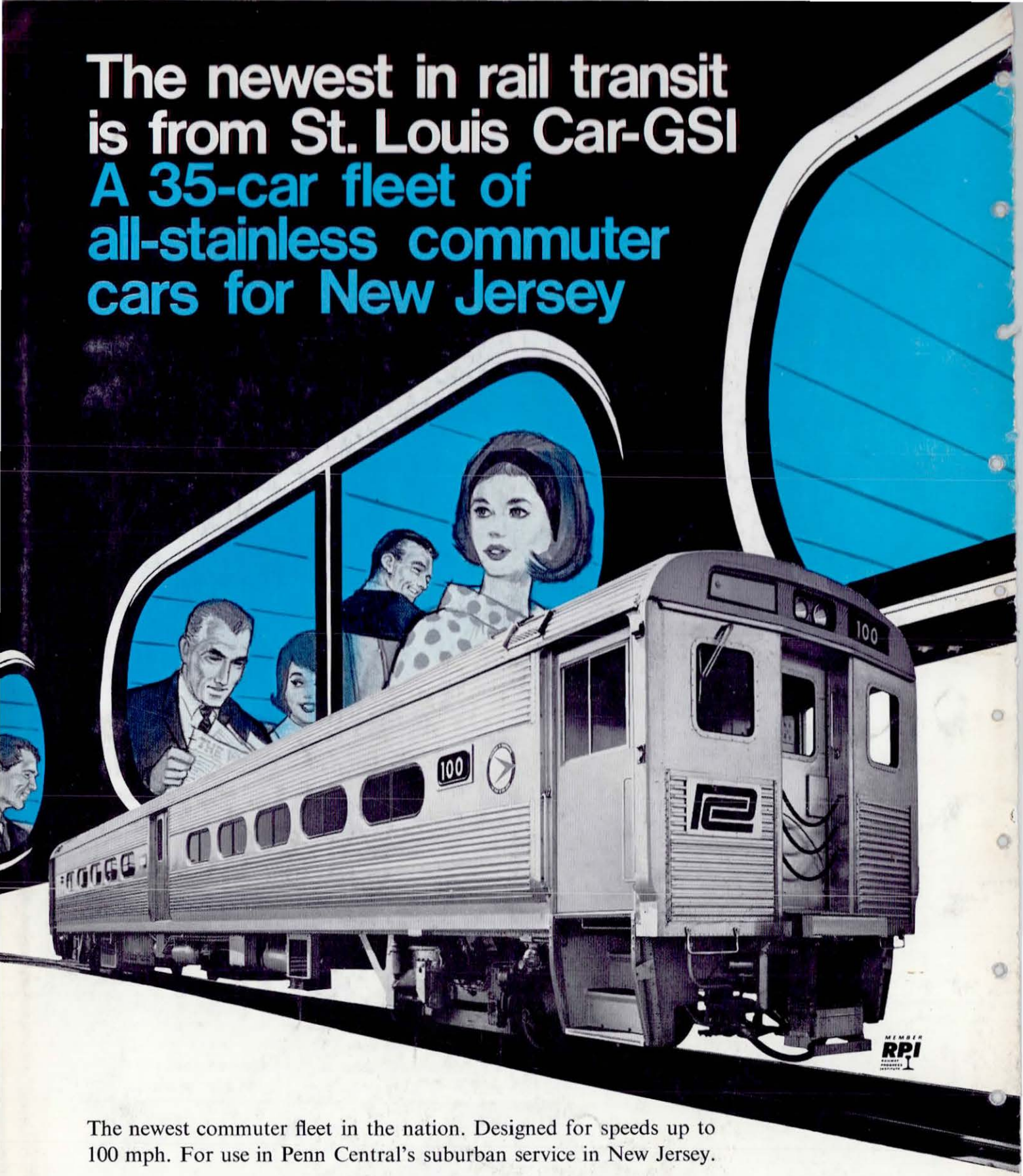

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